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Ted Stevens Anchorage International Airport Master Plan Update Chapter 2 – Inventory of Existing Conditions



Ted Stevens
Anchorage International Airport
Master Plan Update
Chapter 2 – Inventory of Existing
Conditions

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Ted Stevens Anchorage International Airport

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Preface

The Ted Stevens Anchorage International Airport (Airport) Master Plan Update (Master Plan Update) provides Airport management and the Alaska Department of Transportation & Public Facilities (DOT&PF) with a strategy to develop the Ted Stevens Anchorage International Airport. The intent of the Master Plan Update is to provide guidance that will enable Airport management to strategically position the Airport for the future by maximizing operational efficiency and business effectiveness, as well as by maximizing property availability for aeronautical development through efficient planning. While long-term development is considered in master planning efforts, the typical planning horizon for the Master Plan Update is 20 years.

The Federal Aviation Administration provides guidance for Master Plan development in FAA Advisory Circular 150 / 5070-6B, *Airport Master Plans*. Although not required, the Advisory Circular strongly recommends airports prepare a Master Plan. Funding for the Master Plan Update is provided primarily by the Federal Aviation Administration through an Airport Improvement Program grant.

A comprehensive Master Plan Update was last prepared between 2012 and 2014. This Master Plan Update was initiated in December 2021 and is anticipated to conclude in 2025. The DOT&PF entered into a contract with the firm RS&H to lead this effort. The Master Plan Update included a comprehensive public and stakeholder involvement program.

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Acronyms and Abbreviations

AAAC	Airport Airline Affairs Committee
AAC	Aircraft Approach Category or Alaska Administrative Code
AACC	Anchorage Airport Communications Committee
AAD	Annual Average Day
AADT	Annual Average Daily Traffic
AAGR	Average Annual Growth Rate
AC	Advisory Circular
ACHP	Advisory Council on Historic Preservation
ACMI	Aircraft, Crew, Maintenance, and Insurance
ACMP	Anchorage Coastal Management Plan
ACRP	Airport Cooperative Research Program
ADAPT	Annual Delay and Activity Performance Times
ADEC	Alaska Department of Environmental Conservation
ADF	Aircraft Deicing Fluid
ADF&G	Alaska Department of Fish and Game
ADG	Airplane Design Group
ADNR, OHA	Alaska Department of Natural Resources, Office of History and Archaeology
ADOLWD	Alaska Department of Labor and Workforce Development
AEDC	Alaska Economic Development Corporation
AFSC	Anchorage Fueling and Service Company
AGL	Above Ground Line
AHPA	Alaska Historic Preservation Act
AHRS	Alaska Heritage Resource Survey
AIAS	Alaska International Airport System
AIDEA	Alaska Industrial Development and Export Authority
AIP	Airport Improvement Program
Airport	Ted Stevens Anchorage International Airport
AIT	Advanced Imaging Technology
AMATS	Anchorage Metropolitan Area Transportation Study
ANGB	Air National Guard Base
AOA	Air Operations Area
APDES	Alaska Pollutant Discharge Elimination System
APU	Auxiliary Power Units
ARC	Airport Reference Code
ARFF	Aircraft Rescue and Fire Fighting
AS	Alaska Statute
ASDA	Accelerate-Stop Distance Available
ASDE	Airport Surface Detection Equipment

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ASIG	Aircraft Service International Group
ASPM	Aviation System Performance Metrics
ASR	Airport Surveillance Radar
ATCT	Airport Traffic Control Tower
AWMP	Anchorage Wetlands Management Plan
AWWU	Anchorage Water and Wastewater Utility
BAT	Best Available Technology
BGEPA	Bald and Golden Eagle Protection Act
BMPs	Best Management Practices
BRAC	Base Realignment and Closure
BRL	Building Restriction Line
CAA	Clean Air Act
CAD	Computer-aided Design
CATS	Compliance Activity Tracking System
CBIS	Checked Baggage Inspection System
CBP	Customs and Border Protection
CBRA	Checked Baggage Resolution Area
CCSF	Certified Cargo Screening Facility
CDS	Consolidated De-Icing Services
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generator
CFC	Customer Facility Charge
CFR	Code of Federal Regulations, or Crash / Fire / Rescue
CIP	Capital Improvement Plan
CO	Carbon Monoxide
Coastal Trail	Tony Knowles Coastal Trail
COD	Chemical Oxygen Demand
CONRAC	Consolidated Rental Car Facility
CUPPS	Common Use Passenger Processing Systems
CZMA	Coastal Zone Management Act
DHS	Department of Homeland Security
DME	Distance Measuring Equipment
DNL	Day-night Average Sound Level
DO	Dissolved Oxygen
DOT	U.S. Department of Transportation
DOT&PF	Alaska Department of Transportation and Public Facilities
EAS	Essential Air Service
EDS	Explosive Detection System

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EMS	Environmental Management System
EOC	Emergency Operations Center
EQA	Equivalent Aircraft
ETD	Explosive Trace Detection
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FBO	Fixed Base Operator
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIRMs	Flood Insurance Rate Maps
FIS	Federal Inspection Service
FMRA	FAA Modernization and Reform Act of 2012
FY	Fiscal Year
GA	General Aviation
GPS	Global Positioning System
GRE	Ground Run-Up Enclosure
GSE	Ground Service Equipment
HLB	Heritage Land Bank
IAS	International Aviation Services, Inc.
IATA	International Air Transport Association
IBC	International Building Code
IFR	Instrument Flight Rules
IFT	International Freight Terminal
ILS	Instrument Landing System
INM	Integrated Noise Model
ISER	Institute of Social and Economic Research (at the University of Alaska Anchorage)
JBER	Joint Base Elmendorf-Richardson
LDA	Landing Distance Available
LOC	Localizer
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MOA	Municipality of Anchorage
MSA	Metropolitan Statistical Area
MSGP	Multi-Sector General Permit
MSL	Mean Sea Level
MTOW	Maximum Takeoff Weight
NAAQS	National Ambient Air Quality Standards
NAC	Northern Air Cargo
NADP	Noise Abatement Departure Profiles

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NAMS	Northern Air Maintenance Services
NAVAID	Navigational Aid
NCP	Noise Compatibility Program
NDB	Non-directional Beacon
NEMs	Noise Exposure Maps
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport System
NPL	National Priorities List
NRHP	National Register of Historic Places
O&D	Origin and Destination
O&M	Operations and Maintenance
OAIASS	Optimize AIAS Strategy
OER	Operating Expense Ratio
OFA	Object Free Area
OFZ	Obstacle Free Zone
OSR	On-Screen Resolution
PAL	Planning Activity Level
PAPI	Precision Approach Path Indicator
PCC	Portland Cement Concrete
PCI	Pavement Condition Index
PDARS	Performance Data Analysis and Reporting System
PFAS	Per- and Polyfluoroalkyl Substances
PFC	Passenger Facility Charges
PM-10	Particulate Matter with a Diameter of 10 Microns or Less
PM-2.5	Particulate Matter with a Diameter of 2.5 Microns or Less
QTF	Quick-Turnaround Facility
RCRA	Resource Conservation and Recovery Act
RDC	Runway Design Code
RNAV	Area Navigation
ROFA	Runway Object Free Area
RON	Remain Overnight
RPZ	Runway Protection Zone
RSA	Runway Safety Area
RSIP	Residential Sound Insulation Program
RTR	Remote Transmitter Receiver
SCS	Sterile Corridor System

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SHPO	State Historic Preservation Office(r)
SIDA	Security Identification Display Area
SIP	State Implementation Plan
SSCP	Security Screening Checkpoint
STEP	South Terminal Expansion Project
SWPPP	Stormwater Pollution Prevention Plan
TACAN	Tactical Air Navigation
TDG	Taxiway Design Group
TERPS	Terminal Instrument Procedures
TODA	Takeoff Distance Available
TORA	Takeoff Run Available
TRACON	Terminal Radar Approach Control
TSA	Transportation Security Administration
UPS	United Parcel Service
USDA-WS	U.S. Department of Agriculture - Wildlife Services
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USPS	United States Postal Service
VASI	Visual Approach Slope Indicator
VFR	Visual Flight Rules
VOCs	Volatile Organic Compounds
VOR	Very High Frequency Omnidirectional Range
WAAS	Wide Area Augmentation Systems
WADP	West Anchorage District Plan
WBI	Whole Body Imaging
WHA	Wildlife Hazard Assessment
WHMP	Wildlife Hazard Management Plan

2.1 Introduction

In this chapter, existing conditions and capabilities of land areas, facilities, infrastructure, and operations at Ted Stevens Anchorage International Airport (the Airport or ANC) are documented. As is typical of a master plan, this includes the existing conditions and operations of the airside / airfield, passenger terminal and landside, cargo, general aviation, and airport / airline functional support areas. The general purpose of an inventory is to provide a baseline understanding of the facilities and operations for future planning considerations.

The last ANC Master Plan Update was completed in 2014, with a previous interim Master Plan Study Report completed in 2008. The inventory for these master planning efforts occurred in 2012-2013 and 2006, respectively, at the outset of the 2014 Master Plan Update and 2008 Master Plan Study. Inventory efforts for the current Master Plan Update were completed in late 2022 and early 2023. For the current master planning effort, inventory information from the 2014 Master Plan Update effort was reviewed, updated as necessary. An effort was made to contact and interview Airport tenants with changes to their facilities and known operational needs since the 2014 Master Plan Update was completed.

Since the 2014 Master Plan Update, the following key infrastructure projects were completed:

Airfield

- Runway 33 decoupled from Runway 7L-25R (2014)
- Runway 15-33 rehabilitated and widened (2019)
- Runway 15 end / Taxiway Q improved (2019)
- Runway 7L-25R Safety Area improved (2020)
- Taxiway K / Taxiway A intersection rehabilitated (2022)
- Taxiway Z extension construction started (2024)

North Airpark

- FedEx facility expanded (2024)
- Alaska Cargo and Cold Storage construction started (2024)

East Airpark

- Alaska Airlines Maintenance and Engineering hangar constructed (2018)

South Airpark

- South Airpark integrated into the Anchorage Water and Wastewater Utility (AWWU) system
- ROTAK Helicopter Services new hangar constructed (2019)
- Building renovated for Signature Flight Support's new Fixed-base Operator facility (2023)

Inventory information has several key focus areas. These focus areas were identified by Airport staff at the onset of the planning process. The focus areas include understanding the historical

and cultural significance of the Airport site, having a comprehensive public participation process and being cognizant of stakeholder issues, understanding the existing land uses of on-Airport property for future Airport development purposes, and exploring the potential of increasing cargo transfer operations.

As a result, the inventory documents: 1) the history of the Airport site; 2) the regional setting and the Airport's role regionally and globally; 3) Airport staff, tenant, and public stakeholder concerns where applicable; 4) existing land uses and restrictions; and 5) cargo facilities and operations to provide a base level of understanding for future discussions regarding the future of cargo operations at the Airport.

The inventory also provides an overview of the Airport's financial management practices and structure as well as the environmental setting to support future project implementation and environmental documentation efforts that may follow the master plan. The focus areas mentioned above are also documented in other master plan chapters.

Chapter 2 Inventory of Existing Conditions is organized as follows:

- **Section 2.1** Introduction
- **Section 2.2** Historic Context and Background of the Airport
- **Section 2.3** Airport Setting
- **Section 2.4** Airport Land Use
- **Section 2.5** Existing Airport Facilities
- **Section 2.6** Existing Airport Facilities by Geographic Area
- **Section 2.7** Existing Airport Facilities by Functional Area
- **Section 2.8** Financial Overview
- **Section 2.9** Environmental Setting

2.2 Historical Context and Background of the Airport

The Airport is located on the westernmost mainland point of the Municipality of Anchorage (Municipality or MOA), the populated urban area known commonly as Anchorage, Alaska. The site where the Airport and Anchorage are located today has a rich history. One of the goals of the Airport Master Plan Update is to identify and provide insight into the historical and cultural significance of the area to increase awareness of the important issues that could impact or should be considered in Airport development plans.

2.2.1 Historical Context of Airport Site

The larger geographic region in and around the Airport is known as the Upper Cook Inlet area. This area was likely inaccessible to humans until about 12,000 years ago due to the presence of glacial ice and water inundation. Glaciers blocked mountain passes, prohibiting access from the populated interior parts of Alaska.

Researchers believe it was not until 7,500 to 10,000 years ago, when glacial ice receded, that the Upper Cook Inlet area was first inhabited. Archaeological evidence of the Eskimo culture in this area dates back 3,000 years. Other archaeological and linguistic evidence suggests the Dena'ina (formerly "Tanaina") people, named after the Dena'ina language they spoke, occupied the Upper Cook Inlet area beginning 1,500 to 1,000 years ago. Dena'ina villages were clustered around lakes, rivers, and streams throughout the Upper Cook Inlet area. Fish camps, used in the spring and fall, were often located along the coast to take advantage of salmon runs.

Captain Cook's exploration of the Upper Cook Inlet area represented the first documented contact the Dena'ina had with Euro-Americans. Captain Vancouver, who explored Cook Inlet in 1794, found the Dena'ina firmly established in at least five major fishing villages in the Upper Cook Inlet area. An influx of Euro-American gold miners came to Alaska in the 1870s and 1880s and to the Upper Cook Inlet area in the late 1890s. In 1898, Knik was a small outpost with a trading post and a resident population of Dena'ina living in the surrounding area.

Much of the evidence of prehistoric and historic Dena'ina habitation in the Anchorage area was destroyed or buried by public and private urban development. The ongoing development of Anchorage since its founding in 1915 resulted in the displacement of the Dena'ina from their traditional camps and harvest locations. Despite the historic trend of dislocation from traditional areas, there is a strong, continued cultural attachment to many of the traditional and historic places and activities.

2.2.1.1 *Dena'ina Territorial Knowledge and Place Names*

The lower Knik Arm area is rich in Dena'ina place names, fish camps, village sites, and other traditional places. There are several documented Dena'ina sites and place names associated with

the Airport vicinity¹. Perhaps the most revered Dena'ina location in the vicinity of the present-day Airport site is Point Woronzof. The Dena'ina name for this area is Nuch'ishtunt, which translates to "Place Protected from Wind." Historical accounts document this area was used as a fish camp for king and sockeye salmon for at least 100 years until about 1945. The photo in **Figure 2-1** is an example of the Dena'ina fish camps. The photo shows the Dena'ina Chief Nikaly (Nikolai) and his family.

Figure 2-1

Dena'ina ("Chief Nikaly [Nikolai] and Family") at a Fish Camp in Anchorage, 1918



Source: Alaska Pacific University, Alaska Digital Archives website, vilda.alaska.edu, 1918.

2.2.2 Historical Context of Airport

The Alaska Railroad construction started in 1903², paving the way for the mass migration of people to the interior of the Alaskan Territory to take advantage of the abundant minerals,

¹ Kari and Fall, Shem Pete's Alaska: The Territory of the Upper Cook Inlet Dena'ina, University of Alaska Press, 2003.

² Alaska Railroad Corporation website, www.alaskarailroad.com, 2014.

timber, and agricultural land. As the population in the Alaskan Territory grew, aviation quickly became a necessary part of the transportation network. A number of aviation fields were constructed during the 1930s.³ Before that time, unimproved sites (e.g., flat areas of open terrain, water, or ice) were often used as aviation fields.

Merrill Field was constructed as the first aviation field in Anchorage. Merrill Field supported the operation of the United States military during much of the facility's early years. As larger and faster aircraft became more common, the modest Merrill Field facilities were quickly outgrown. Military operations eventually moved to the newly constructed Elmendorf Air Force Base. In 1948, the United States Congress authorized \$13 million for the construction of two "international type" airports in Alaska – one to be located in Fairbanks and the other in Anchorage.⁴ The results of a Civil Aeronautical Authority⁵ (predecessor of the present-day Federal Aviation Administration [FAA]) feasibility study demonstrated the practicability and necessity for constructing new airports in the two most populous Alaskan cities.

Airfield operations at ANC commenced in December 1951, and the first passenger terminal was constructed in 1952. A ceremony in 1953 marked the official opening of the Airport. It quickly demonstrated its vitality as 90% of Alaska's passenger traffic and 65% of its mail were transported by airlines based in Anchorage during the early 1950s. **Figure 2-2** depicts an aerial image of the ANC in 1950. In spring 1955, the Air National Guard was relocated to the Airport from Elmendorf Air Force Base. The Squadron would go on to occupy the Kulis Air National Guard Base for nearly six decades.

The latter half of the 1950s was witness to an upswing in international travel through Anchorage. It was a common occurrence for commercial passenger flights between Europe and Asia to transit through Anchorage due to the inaccessibility of Chinese and Soviet Union airspace. This encouraged "over the pole" routes for trans-Pacific flights and stopovers in Anchorage because of the limited range of aircraft of the time.⁶ The Omnibus Act of June 25, 1959, allowed Alaska to achieve statehood and become the nation's 49th State. Ownership and control of ANC was subsequently transferred to the State of Alaska on May 1, 1960.

³ Albert Minnick, "To Build a Suitable Airport:" The Development of Anchorage's Merrill Field, 1929-1980, (Alaska Historical Society, 1987).

⁴ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

⁵ Alaska Department of Transportation and Public Facilities, Anchorage International Airport Master Plan, 1981.

⁶ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

Figure 2-2
1950 Aerial Image of Anchorage International Airport



Source: Airport staff, 1950.

The 1959 Omnibus Act also granted federal transitional funds to the State of Alaska to be used for capital projects at the Airport.⁷

The 1960s brought a population and economic boom for Anchorage, encouraged in part by the expansion of oil and gas fields in the nearby Kenai Peninsula. The economic growth also translated to growth in aviation activity. Seven international air carriers used Anchorage as a regular stopover between Asia and the United States. Anchorage had established its identity as the “Air Crossroads of the World.” The new decade also introduced the Jet Age as airports scrambled to upgrade facilities to accommodate larger and faster aircraft. The original east / west runway was extended from 8,400 feet to its present-day length of 10,600 feet in 1960.⁸

⁷ Alaska Department of Transportation and Public Facilities, Anchorage International Airport Master Plan, 1981.

⁸ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

A 1967 study concluded that a new runway should be constructed in the north / south direction. The recommendation was made primarily because it was deemed impractical to reconstruct the east / west runway without closing it for at least a year. Closing the east / west runway would have essentially required closure of the ANC because the 5,000-foot north / south runway was too short for the newer jet aircraft. The new plan proposed that the north / south runway would become the primary runway until the east / west runway could be reconstructed. However, the recommended north / south runway was not constructed at that time because of strong opposition from the United States military.

The military opposed constructing a new north / south runway because it would directly conflict with the approach procedures to the east / west runway at Elmendorf Air Force Base. As a result, a new parallel runway (present-day Runway 7R-25L) was constructed south of the existing east / west runway. The new runway, depicted as **Figure 2-3**, was completed in 1970, in time for the arrival of the first Boeing 747.⁹

During the 1970s, aviation demand at ANC continued to increase as the State of Alaska approved construction of the \$8 billion Trans-Alaska Pipeline from the North Slope, the northernmost geographic area of Alaska. Additional aviation growth came in the form of significant increases in international passenger traffic.¹⁰

A new international satellite terminal was constructed in 1982 after several years of delays because of fears that Anchorage would no longer be a stopover point for international traffic due to rising fuel prices. The new terminal would later be called the North Terminal.¹¹ Years later, plans for a new or extended north / south runway were again introduced. New justifications reasoned that a north / south runway could allow for more efficient traffic patterns with different runway use configurations instead of just a crosswind runway. The runway was also justified as a method to reduce noise levels over the more populated residential areas. The idea of a new north / south runway was again met with opposition from the United States military. Despite the objection, the north / south runway project was approved. Construction of the new north / south runway began in 1978 and was completed in 1980. The new runway, offset to the west of the old runway, was built to a length of 10,496 feet.¹² The original north / south runway was turned into a taxiway. The new 10,496-foot north / south runway is depicted in **Figure 2-4**.

⁹ Alaska Department of Transportation and Public Facilities, Anchorage International Airport Master Plan, 1981.

¹⁰ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

¹¹ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

¹² Alaska Department of Transportation and Public Facilities, Anchorage International Airport Master Plan, 1981.

Figure 2-3
1970 Aerial Image of Anchorage International Airport



Source: Airport staff, 1970.

In 1987, a 1,200-space parking garage was built to support the South Terminal. Between 1989 and 1990, FedEx and United Parcel Service (UPS) established international cargo sorting operations at the Airport.¹³ The sorting facility for each airline serves as a key component in the international cargo transfer between the Americas and East Asia.

¹³ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

Figure 2-4
1982 Aerial Image of Anchorage International Airport



Source: Airport staff, 1982.

Russian airspace opened in 1989, which allowed over-flights without the requirement of a stopover at ANC.¹⁴ This created alternate routes for international flights, ending decades of inefficient flight paths to avoid the restricted airspace. The airspace expansion significantly impacted the Airport's role as a stopover for international passenger aircraft. Passenger aircraft could now bypass Anchorage on trans-Pacific flights because of more efficient flight paths. As a result, transit operations decreased.

While international passenger traffic dropped off in the early 1990s due to alternative routes, other sectors flourished. Air cargo operators commenced or expanded operations in Anchorage, and domestic passenger traffic increased. However, it was not until 1994 that international passenger traffic at ANC again began to increase. The 1990s and early 2000s were witness to numerous expansion projects at the Airport for both the public and private sectors. The north /

¹⁴ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

south runway was extended more than 1,000 feet to 11,584 feet between 1995 and 1996. Between 1999 and 2004, the South Terminal underwent major renovations. The main terminal and concourse, which was constructed in 1952, was demolished, and a new main terminal and the C Concourse were constructed. Terminal area parking lots and road access were also improved as a part of the terminal project.¹⁵

The new millennium brought many other changes for ANC. In 2000, State legislators passed a bill to honor Alaska's United States Senator, Ted Stevens, by renaming the Airport in his honor. The Airport then became known as Ted Stevens Anchorage International Airport.

The passenger terminal area was the site of many capital improvement projects in the early 2000s. In 2000, the Airport began construction of the new 463,227-square-foot C Concourse in the South Terminal. Construction continued for four years, and the Airport celebrated the grand opening of the new world class terminal on June 30, 2004. Following the recommendation of the 2005 Base Realignment and Closure Commission, the Air National Guard's 176th Wing vacated the Kulis Air National Guard Base at the Airport and relocated its operations to the renamed Joint Base Elmendorf-Richardson (JBER) in February 2011.¹⁶ The site of the former base is now integrated into the South Airpark after it was transferred to the State of Alaska for reuse by the Airport. The 2012 aerial of the Airport is depicted in **Figure 2-5**.

Several airfield improvement projects and tenant improvement projects were completed in the period between the completion of the 2014 Master Plan Update and 2022.

In summer 2014, the Runway 33 end was decoupled from Runway 7L-25R, so the Runway 15-33 Runway Safety Area (RSA) no longer overlaps the Runway 7L-25R pavement. The Runway 33 end was moved 624 feet north. The project reduced the runway length to 10,960 feet from 11,584 feet. The Runway 33 end is now located just south of the southern edge of Taxiway K. Shifting the Runway 33 end north did not impact the normal departure procedures; aircraft continue to depart from Runway 33 via Taxiway K. The Runway 33 arrivals threshold did not change. The pavement south of the new Runway 33 end was converted to a blast pad. This project also included reconstruction of the west end of Runway 7L-25R.

¹⁵ Ted Stevens Anchorage International Airport History website, <http://dot.alaska.gov/anc/about/history.shtml>, 2012.

¹⁶ Alaska Air National Guard 176th Wing website, <http://www.176wg.ang.af.mil/>, n.d.

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Figure 2-5
2012 Aerial Image for Ted Stevens Anchorage International Airport



Source: Airport staff, 2012.

In fall 2018, construction was completed on the Alaska Airlines Maintenance and Engineering hangar in the East Airpark. The project included a 100,000 square foot hangar capable of simultaneously accommodating two Boeing 737 aircraft. In early 2019, a new hangar for ROTAK Helicopter Services completed construction on the east side of the South Airpark.

In summer 2019, the Runway 15 runway end was shifted south, and the displaced threshold was removed. The Runway 15-33 length at the conclusion of that project is 10,865 feet, down from 10,960 feet. The Runway 15-33 and Taxiway Q intersection was reconfigured to align with the new runway end. Runway 15-33 was rehabilitated and widened to 200 feet as part of the same project. The project also included constructing a paved area around the Runway that matches the dimensions of the RSA which supports a more efficient snow removal operation in the wintertime. A similar project to improve the paved area around Runway 7L-25R was completed in 2020.

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The 2022 aerial of the Airport, depicted in **Figure 2-6**, depicts the projects listed above. There are additional projects completed later in 2022 through 2024 that are not shown on the 2022 aerial photo.

Figure 2-6
2022 Aerial Image for Ted Stevens Anchorage International Airport



Source: Lounsbury and Associates, 2022.

Several existing buildings in the Kulis Business Park were renovated and repurposed for civilian use. One example is a building that was renovated to serve as Signature Flight Support's new Fixed-base Operator (FBO) facility in 2023.

Several other projects have received environmental entitlement under the National Environmental Policy Act (NEPA) and are in the early stages of construction as of June 2024. Those projects are the NorthLink Aviation cargo facility, the FedEx ANCA cargo facility, the Alaska Cargo and Cold Storage facility, and the Taxiway Z extension.

The NorthLink Aviation cargo facility is planned to be a 90,000 square-foot cargo terminal in the South Airpark. The NorthLink cargo campus is planned to include 15 aircraft parking positions when the project is completed.

The FedEx ANCA facility is an expansion of the existing FedEx campus in the North Airpark. The project is planned to add a new domestic operations center, warehouse improvements, and aircraft parking south of Taxiway U within a 22-acre site.

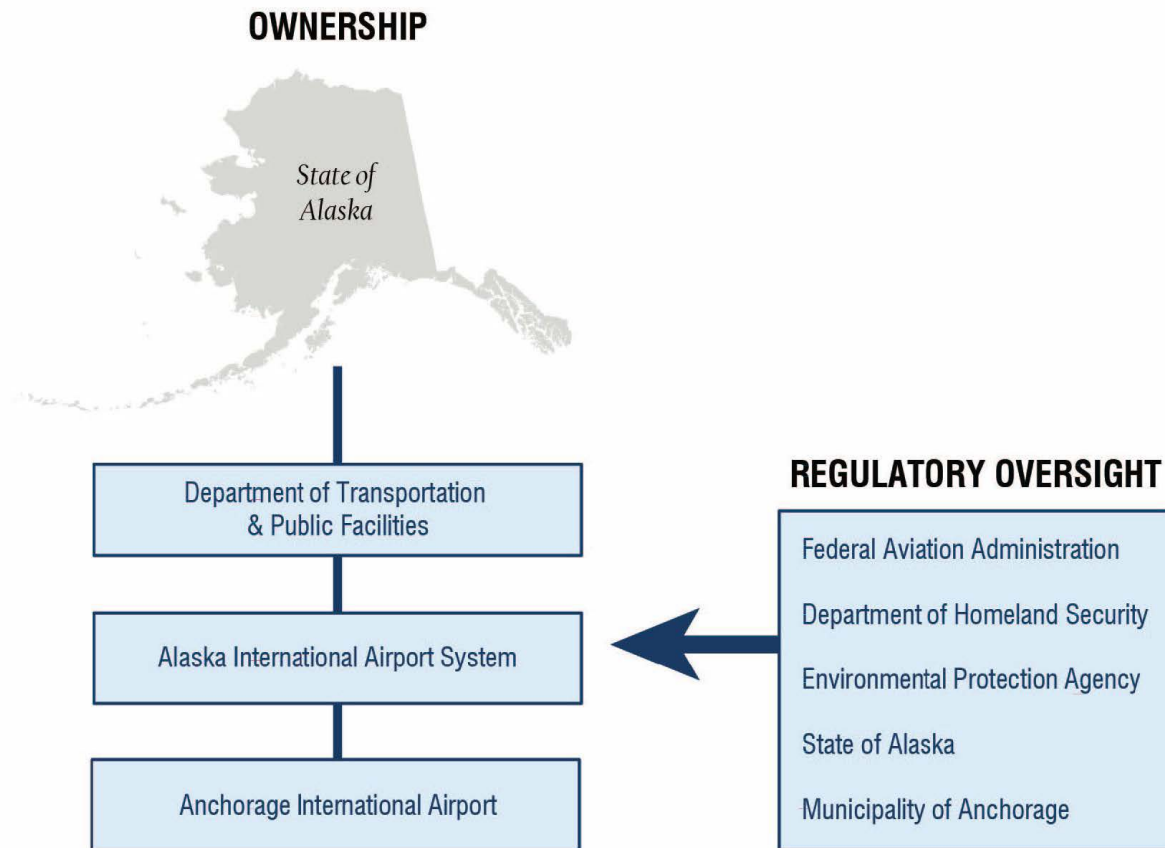
The Alaska Cargo and Cold Storage facility is planned as a climate-controlled warehouse facility in the North Airpark, south of Taxiway P. The facility is designed to support air cargo shipments of frozen or perishable goods through ANC.

The Taxiway Z Phase I west extension project includes improvements to Taxiway Z, Taxiway E, and Taxiway R. The project includes removal of the segment of Taxiway F between Taxiway Z and Runway 7R-25L. The project includes several enabling projects such as utility relocation and Runway 15 localizer relocation.

2.2.3 Airport Ownership, Management, and Oversight

The Airport is owned and operated by the State of Alaska, regulated by local, federal, and state agencies, and occupies State land within the Municipality of Anchorage (MOA). The relationships between the various agencies and organizations with ownership, management, and oversight of the Airport are graphically summarized in **Figure 2-7**.

Figure 2-7
Airport Ownership and Oversight



Source: RS&H and HDR, 2014.

2.2.3.1 Alaska Department of Transportation and Public Facilities

The Alaska Department of Transportation and Public Facilities (DOT&PF) is a State government agency that "designs, constructs, operates and maintains Alaska's transportation infrastructure systems, buildings, and other facilities used by Alaskans and visitors."¹⁷ This includes highways, airports, harbors, and a ferry system that serves coastal communities. The agency's mission is to "Keep Alaska Moving through service and infrastructure". The Airport is by far the largest of the 237 airports owned and operated by DOT&PF.

Following the creation of Anchorage International Airport and Fairbanks International Airport, the airports were owned and operated by the federal government. When Alaska became a state in 1959, ownership of the two airports was transferred from the federal government to the State of Alaska. The Alaska State Legislature created the Alaska International Airport System (AIAS) in 1961 to oversee both airports.

¹⁷ Department of Transportation and Public Facilities website, <https://dot.alaska.gov/comm/about.shtml>, 2023.

The AIAS operates under the purview of the DOT&PF as a state-owned enterprise fund, and the two airports share revenues and expenses in the International Airport Revenue Fund. The AIAS is funded by user fees and its operation is financially independent of the State's General Fund. However, the AIAS still requires approval from the State Legislature for expenditures. The AIAS is led by a Deputy Commissioner for Transportation who acts as the AIAS Executive Director. The AIAS staff consists of a Controller section, Transportation Planner and the Executive staff of both international airports. The Aviation Advisory Board provides recommendations to the Commissioner of the DOT&PF and Deputy Commissioner of Aviation regarding public policy related to AIAS and other statewide aviation affairs.

The two AIAS airports operate as a unified system serving as each other's alternate landing site in the case of a closure. The system boasts 100% reliability. The two airports are separated by more than 260 miles with the Alaska Range and Talkeetna Mountains in between. Therefore, the airports are never simultaneously closed by the same severe weather system. This ensures operational certainty, especially for the large cargo aircraft that frequent the facilities. The AIAS sponsored a study as part of an overall strategic planning effort to enhance AIAS asset management and support long-term financial viability, and a 2013 AIAS Planning Study was conducted independently of the previous 2014 Master Plan Update.

2.2.3.2 Federal Aviation Administration

The DOT&PF owns the Airport and the land it occupies. However, the DOT&PF is not free to set policy with impunity. The FAA also exercises a degree of control over the Airport as the FAA executes its mission to "provide the safest, most efficient aerospace system in the world."¹⁸ In doing so, the FAA places numerous strict restrictions on the Airport. Requirements to abide by FAA regulations are applied to airports through a number of means. Airports certified for scheduled commercial service under Title 14, Code of Federal Regulations (CFR), Part 139 must, first and foremost, abide by FAA safety regulations to maintain their certification. This regulation allows the FAA to object to and restrict certain types of development within safety areas on and off airport property. Additional information regarding these FAA obligations is presented in Section 2.4, Airport Land Use.

2.2.3.3 Municipality of Anchorage

The MOA, as depicted in **Figure 2-8**, is a 1,955-square-mile (approximately 1,251,200 acres) geographic and jurisdictional area located between Prince William Sound and the Upper Cook Inlet. The Anchorage Bowl, comprising 100 square miles (approximately 64,000 acres), is the urbanized area of the MOA and is where the Airport is located. Although geographically located in the MOA, the Airport is not jurisdictionally a part of the MOA because it is owned and

¹⁸ Federal Aviation Administration website, <http://www.faa.gov/>, 2023.

operated by the DOT&PF. As a result, the MOA has limited control over Airport operations. However, the MOA does control the zoning and land use of adjacent, off-Airport properties and the urbanized areas around the Airport where most residents live.

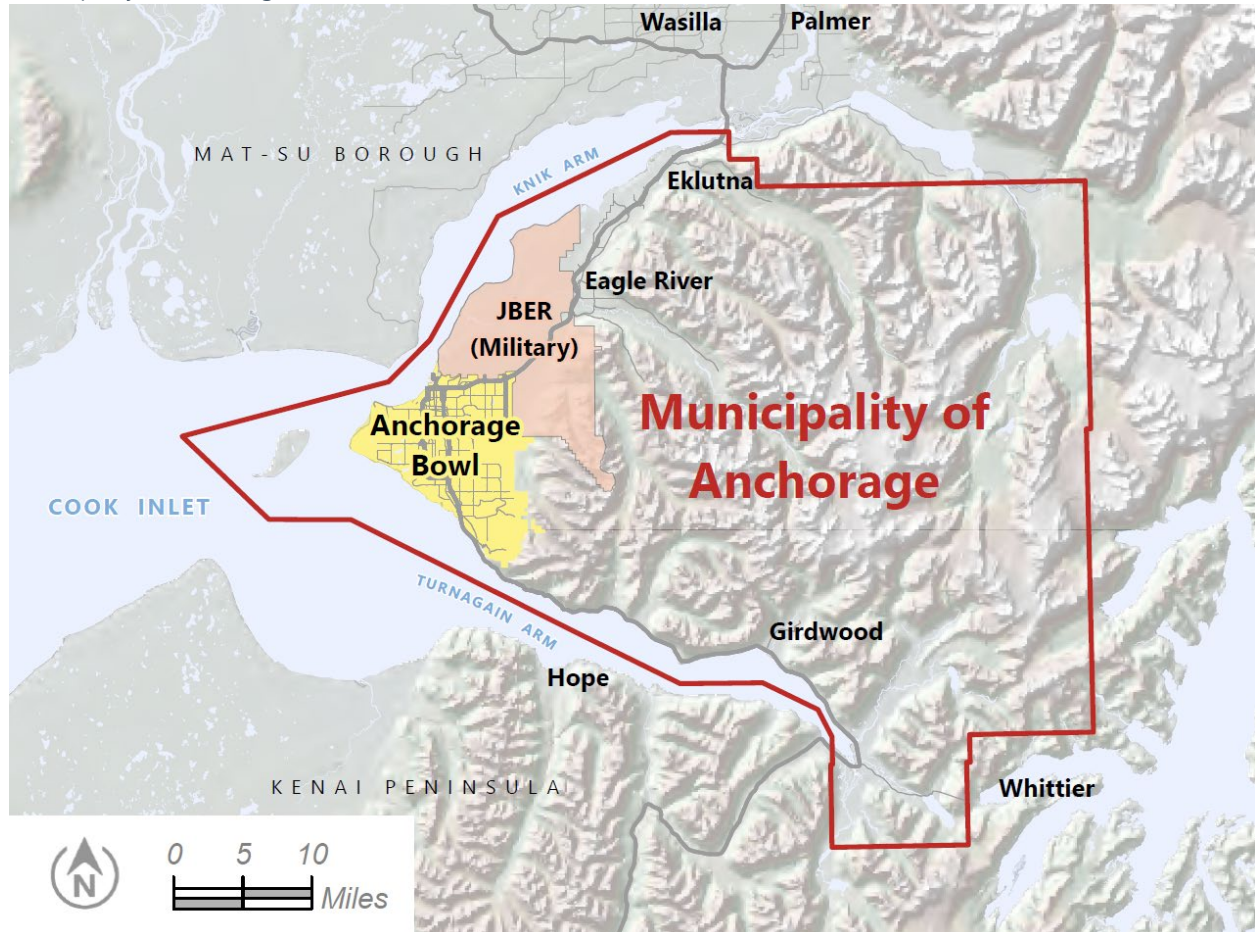
The relationship between the MOA and the Airport is often a point of confusion. There is a common misconception that the MOA operates the Airport because it is located within its jurisdictional boundary. The Airport administration continues its efforts to clarify this misconception, as it recognizes its responsibility to be a good neighbor and work with the adjacent community and MOA to address concerns regarding Airport affairs.

MOA leaders want Anchorage to be a great place to live, work, and play by focusing the MOA's governmental efforts on improving public safety and welfare. Although the missions of the FAA and the MOA are different, they are not mutually exclusive. All involved agencies coordinate with each other to achieve both independent and shared goals.

The Anchorage 2040 Land Use Plan, adopted in September 2017, is the Municipality's Comprehensive Plan that guides much of the long-term planning for the Anchorage Bowl. It is an update to the Anchorage 2020 – Anchorage Bowl Comprehensive Plan. The 2040 Land Use Plan incorporates analysis of updated Anchorage demographics and projected growth, economic changes, land uses, and future land capacity.

Some neighborhoods within Anchorage have their own plans. The West Anchorage District Plan (WADP), adopted in July 2012, is a "step-down" plan intended to bridge the vision and goals set forth in the Municipality's Comprehensive Plan but specific to the West Anchorage area. The West Anchorage Planning Area comprises approximately 13,200 acres of the Anchorage Bowl. The goal of the WADP was to establish general public policy that reflected the vision of residents, landowners, and public entities for future growth in West Anchorage. Airport related issues and solutions are key feature of the plan given the Airport's prominence in West Anchorage.

Figure 2-8
Municipality of Anchorage



Source: RS&H, 2023.

2.2.4 Airport Role

The Mission of the Airport is to “safely, effectively, and efficiently operate and maintain the airport in a manner consistent with Federal regulatory requirements, high service standards, sensitivity to user needs, and awareness of community goals.” To fulfill this Mission, the Airport has a staff of employees within the DOT&PF to plan, develop, operate and maintain its facilities. In addition, the Airport receives support from other agencies such as the FAA, Transportation Security Administration (TSA), and U.S. Customs and Border Protection.

Airport employees are tasked with the safe and efficient operation of the Airport. Airport management staff is responsible for decision-making regarding the operation and future development of the Airport. Specifically, it is the responsibility of the Airport Manager to oversee Airport employees and ensure the safe and efficient operation of the Airport on a daily basis. The Airport Manager reports directly to the AIAS Executive Director. The Airport Manager must also ensure that the Airport continually meets the requirements set forth by the FAA.

Major Airport construction efforts are overseen by DOT&PF management staff and the FAA for compliance and safety. Additionally, all construction projects undergo review for impacts to the environment and community, in accordance with federal, state, and local laws.

To support the Airport Mission, it is important that the Master Plan Update process foster the role of the Airport as a vital transportation asset in the MOA, region, state, and world. The Airport is one of a handful of airports in Alaska built to accommodate large aircraft. The Airport has an important role in the transport of passengers and cargo because of its geographic location between Asia and the Americas. As a result, economic growth in the United States and Asia typically translates into increased needs for aviation facilities at the Airport. The Airport needs to maintain its facilities to continue to attract international as well as intrastate passenger and cargo activity that may spur the economy by bringing in new residents and business.

A description of the Airport's role at a global, state, and local level is provided in **Section 3.1.1** of **Chapter 3 Forecast of Aviation Demand**.

2.3 Airport Setting

A discussion of the area surrounding the Airport is provided in this section for an understanding of the socioeconomic profile, businesses, transportation system, freight movement, and land uses, including recreation and open space. Compatibility issues such as noise and the interaction of the Airport with other nearby airports are also documented. The purpose is to provide a reference to aid in future development decisions both on and off-Airport land.

In addition to describing the surrounding area and compatibility issues, future considerations for property decisions are also discussed. Considerations include 1) maintaining the safety of those who use the Airport and those who live and work near the Airport, 2) maximizing the efficiency of Airport operations to attract additional aviation businesses, 3) encouraging and maximizing a mutually beneficial relationship between Airport operations and activities within the region, and 4) knowing what potential opportunities and constraints exist for future land use development efforts.

2.3.1 Regional Setting

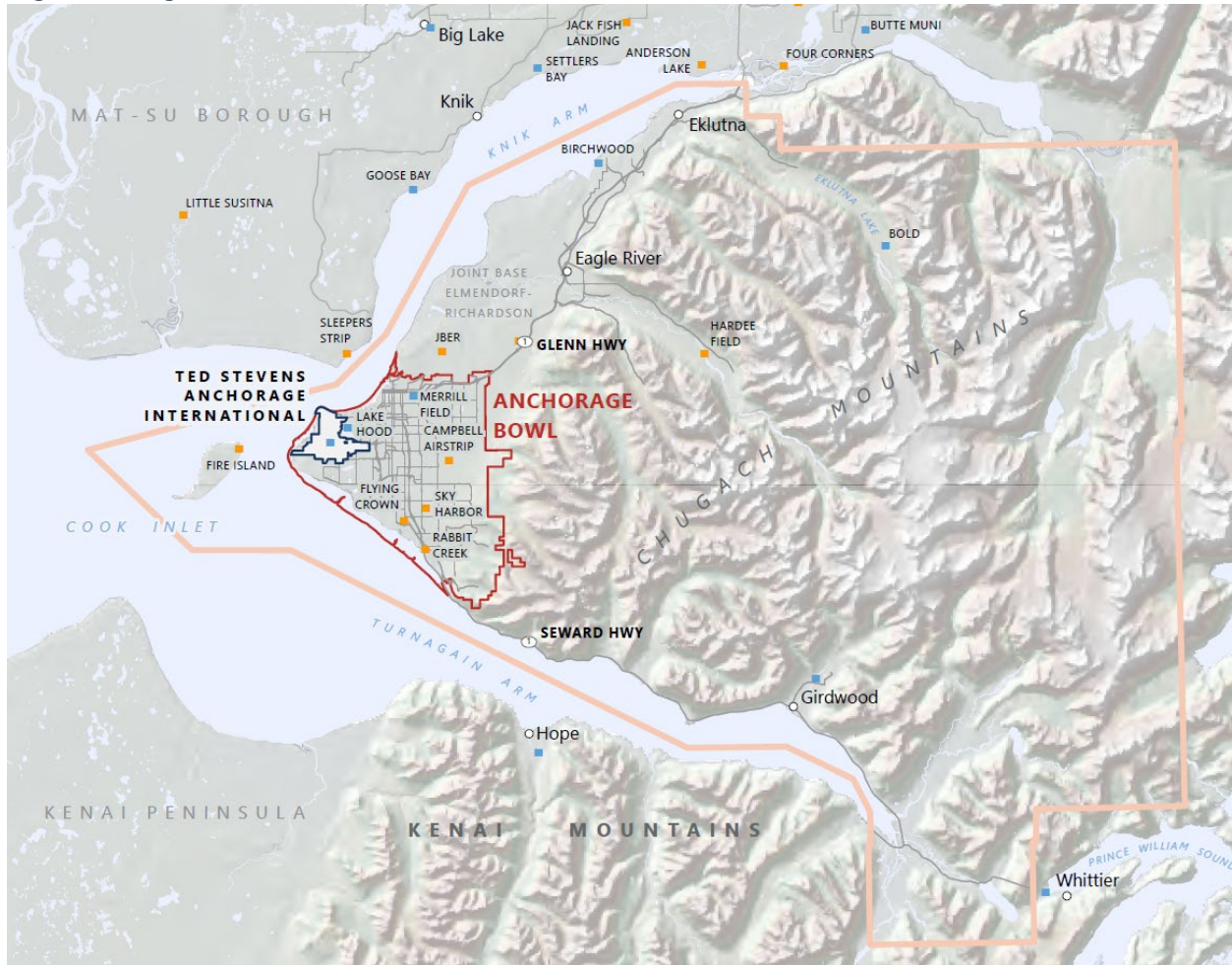
The geographic boundary that defines the regional setting for the Airport Master Plan Update is the Anchorage Metropolitan Statistical Area (MSA), depicted in **Figure 2-9**. As described in Chapter 3 Forecast of Aviation Demand, the Anchorage MSA includes the Airport, the MOA and the Matanuska-Susitna Borough. The land area for the Airport, although owned by the State of Alaska, is located within the Anchorage Bowl and West Anchorage. The Anchorage Bowl exists within the MOA and includes the Airport (33% of the Anchorage Bowl) and the majority of the business areas of downtown Anchorage.

West Anchorage comprises 16% of the total Anchorage Bowl population¹⁹. The West Anchorage Planning Area consists of approximately 13,200-acres bounded by the Cook Inlet and Knik Arm to the west; Westchester Lagoon to the north; West Dimond Boulevard to the south; and Minnesota Boulevard, C Street, Arctic Boulevard, and Spenard Road to the east.

¹⁹ Municipality of Anchorage and URS Corporation, West Anchorage District Plan, 2012.

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Figure 2-9
Regional Setting



Source: RS&H, 2023.

2.3.2 Residential Areas

Although residential areas appear throughout the region, the residential areas discussed in this section are limited to those surrounding the Airport within the West Anchorage Planning Area. These residential areas include the Turnagain, Spenard, and Sand Lake neighborhoods, which are the communities most impacted by aviation activities at the Airport. The Turnagain and Spenard neighborhoods are predominately planned subdivisions with mostly single-family housing, but also include multi-family dwellings. The Sand Lake neighborhood includes mostly single-family housing. All three neighborhoods have room for future residential growth. The Sand Lake gravel pits, located south of the South Airpark, are an area where large plats of homes continue to be developed.

Each neighborhood is well established. Although the neighborhoods have adequate infrastructure, it is aging in some areas. Several schools serve the area. The public schools

closest to the Airport are the Kincaid Elementary School, located near Raspberry Road and Sand Lake Road, south of the Kulis Business Park; and the Lake Hood Elementary School, located north of Spenard Lake on West 40th Avenue.

Each neighborhood has a community council that works with the Airport to address community concerns related to the Airport. Community concerns include noise from aircraft operations and road congestion caused by passenger vehicles and trucks along Northern Lights Boulevard and Raspberry Road.

2.3.3 Surrounding Business Areas

The primary industries in Alaska are based on oil and gas production, tourism, mining, timber, and agriculture. Statewide, future employment is anticipated to increase in the trade, finance, and service industries. In the Anchorage Bowl, the Alaska Economic Development Corporation (AEDC) estimates an increase in the trade and healthcare industry²⁰. Most of the employment opportunities in the Anchorage Bowl are located in the downtown and midtown business districts.

The commercial area called the Spenard Road Corridor exists immediately adjacent to the Airport, extending northeast towards the downtown business district along Spenard Road. The Spenard Corridor Plan (SCP) was adopted by the Municipality of Anchorage in 2020²¹. Industrial areas are located southeast of the Airport from Minnesota Drive and International Airport Road and extend as far south as Raspberry Road.

The Airport generates employment for approximately 15,500 on-site jobs. These on-site jobs generate an annual payroll of \$640 million. Onsite jobs represent 10.3% of total employment in Anchorage. When offsite jobs are included, Airport jobs make up 14.6% of total employment in Anchorage (1 in 7 jobs)²².

2.3.4 Nearby Airports

As part of the regional setting, it is important to consider the public regional airports whose activities may impact or be impacted by the Airport. These public regional airports include: the Lake Hood Airport, Joint Base Elmendorf-Richardson (JBER), Merrill Field, and Campbell Airstrip. Consideration of Lake Hood Airport, Merrill Airfield, and JBER, is important because they are located within the Anchorage Terminal Area. The airspace interactions are described in Section **2.7.2 Airspace**. Descriptions of the airports surrounding the Airport are included in this section.

²⁰ Municipality of Anchorage and URS Corporation, West Anchorage District Plan, 2012.

²¹ Municipality of Anchorage Transportation Planning, Spenard Corridor Plan, 2020.

²² Alaska DOT&PF, The Economic Contribution of the AIAS to Alaska's Economy in 2017, 2019

2.3.4.1 Lake Hood Airport

The Lake Hood Airport (LHD), located immediately east of the Airport passenger terminal complex, is a public-use general aviation facility with a float pond and gravel runway. The most recent Master Plan Update for Lake Hood Airport was completed in September, 2017²³. Lake Hood Airport is the largest and busiest seaplane base in the world. Air traffic at LHD is controlled by FAA Air Traffic Control by the same controllers in the ANC Tower who handle ANC operations. LHD is also owned and operated by the Alaska Department of Transportation and Public Facilities (DOT&PF).

LHD is composed of two aviation facilities: Lake Hood Seaplane Base and Lake Hood Strip. Lake Hood serves floatplanes in the warmer months and planes equipped with skis in the winter months. The Lake Hood Seaplane Base uses Lake Hood, Lake Spenard, and the connecting Hood Canal as the airfield surface. The Seaplane Base has three water-lanes oriented in differing directions. The 1,930-foot-long north / south water lane and 1,369-foot-long northwest / southeast water lane are located within Lake Hood. The 4,541-foot-long east / west water lane spans from Lake Hood to Lake Spenard via the Hood Canal.

Aircraft equipped with wheels also operate at LHD using Runway 14-32. Runway 14-32 is a 2,200-foot-long, 75-foot-wide gravel surface runway located northeast of Lake Hood. Aircraft can also move from tie-down areas and hangars at LHD to ANC via Taxiway V which connects to two airport taxiway systems.

2.3.4.2 Joint Base Elmendorf-Richardson

JBER is a United States military complex located five miles northeast of the Anchorage central business district and eight miles northeast of the Airport. The base (formally known as Elmendorf Air Force Base) was renamed after the unification of Elmendorf Air Force Base and Fort Richardson under the Base Realignment and Closure Commission. The 176th Wing of the Alaska Air National Guard also relocated to the base and vacated the Kulis Air National Guard Base (now known as the Kulis Business Park) formerly found on the southern portion of the Airport property. JBER has three asphalt runways and a gravel strip as well as a water lane at Sixmile Lake. Two of the asphalt runways are located at Elmendorf: Runway 16-34, which is 7,493 feet long and 150 feet wide; and Runway 6-24, which is 10,000 feet long and 200 feet wide. In addition, there is one asphalt runway at Richardson (Bryant Army Airfield): Runway 17-35 is 4,088 feet long and 100 feet wide.

²³ State of Alaska Department of Transportation and Public Facilities Ted Stevens Anchorage International Airport and DOWL, Lake Hood Seaplane Base Master Plan Update, 2017.

In October 2022, JBER started construction on an extension to Runway 16-34. The Runway will be extended by 2,900 feet and the resulting runway length will be 10,000 feet.²⁴ The project is anticipated to be complete in September 2025. The current length of Runway 16-34 limits the operational capability of the flying missions for large aircraft, such as the C-17 Globemaster III based at JBER, specifically during poor weather conditions. The purpose of extending Runway 16-34 is to provide full capability for the aircraft fleet and optimize airfield performance. This becomes particularly useful during poor weather conditions, but also provides reduced potential for conflict with surrounding air traffic. The JBER runway project will reduce airspace conflicts with surrounding airports, which have been an ongoing challenge for decades. Improvements to the airfield lighting and Instrument Landing System (ILS) will also be completed, enhancing flight safety and traffic coordination in the area.

2.3.4.3 *Merrill Field*

Merrill Field (MRI) is a towered, general aviation airport located one mile east of the Anchorage central business district. The most recent Master Plan Update for Merrill Field was completed in December 2016²⁵. Merrill Field has three runways. Runway 5-23 is a 2,000-foot-long by 60-foot-wide gravel and dirt surface runway. Runway 7-25 is a 4,000-foot-long by 100-foot-wide asphalt runway. Runway 16-34 is a 2,640-foot-long by 75-foot-wide asphalt runway. Merrill Field has 844 based aircraft.²⁶

2.3.4.4 *Campbell Airstrip*

Campbell Airstrip (CSR) is a private-use, non-towered, general aviation airport located four miles southeast of the Anchorage central business district. Runway 2-20 is the airstrip's only runway; it is 5,000 feet long by 150 feet wide, with a gravel surface. There are no known airspace interactions with the Airport.

2.3.5 Regional Transportation and Traffic

The roadway system within the Anchorage MSA is well developed, with the major streets classified in the 2014 Anchorage Metropolitan Area Transportation Solutions (AMATS) Streets and Highways Plan. This plan complements the Anchorage 2040 Land Use Plan and supports the AMATS Anchorage Bowl 2040 Long-Range Transportation Plan (June 2020). AMATS is the federally recognized Metropolitan Planning Organization for the Anchorage metropolitan area. Its focus is to work together with other agencies to plan and fund transportation systems in the Anchorage Bowl and Chugiak-Eagle River areas. The street classifications around the Airport are depicted in **Figure 2-10**.

²⁴ JBER Public Affairs, JBER Breaks Ground on \$309 Million Runway Extension, 2022.

²⁵ Merrill Field Airport Master Plan Update, 2016.

https://www.muni.org/Departments/merrill_field/Documents/12.23.16%20Final%20AMP%20Report.pdf

²⁶ FAA National Plan of Integrated Airport Systems (NPIAS) 2023-2027, 2022

The main access roads to the Airport are West International Airport Road, Northern Lights Boulevard, Postmark Drive, Raspberry Road, and Jewel Lake Road. Each roadway is classified in the AMATS Streets and Highways Plan. West International Airport Road is classified as an expressway (Class IV), with four to six lanes, and minimum right-of-way width of 130 feet. Annual average daily traffic volumes in 2021 at the West International Airport Road and Postmark Drive intersection averages 23,100 vehicles per day²⁷.

Jewel Lake Road is classified as a major arterial (Class III) just south of West International Airport Road, with four lanes, and a minimum right-of-way of 100 feet. Annual average daily traffic volumes in 2021 at the West International Airport Road and Jewel Lake Road intersection totaled 32,100²⁸.

Northern Lights Boulevard, Postmark Drive, and Raspberry Road are minor arterials (Class II). Each road has two to four lanes, and minimum rights-of-way of 80 feet. Annual average daily traffic volumes in 2021 at the Raspberry Road and Jewel Lake Road intersection totaled 21,100²⁹. Annual average daily traffic volumes in 2021 at the Northern Lights Boulevard and Aero Avenue intersection totaled 11,700 vehicles. Aero Avenue is the closest signalized intersection to the Airport on Northern Lights Boulevard. The intersection is located east of Northern Lights Boulevard / Postmark Drive intersection.

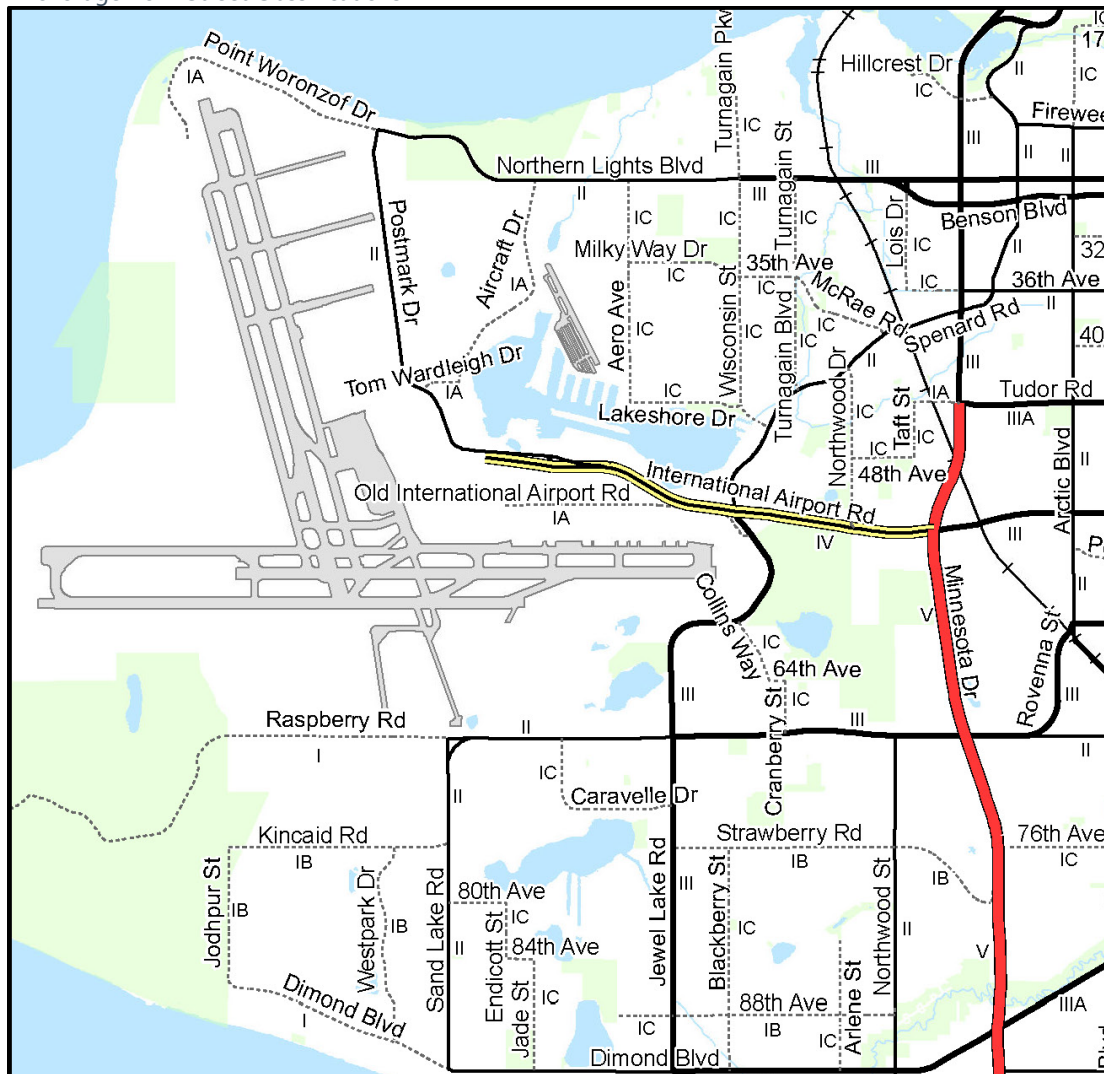
²⁷ Municipality of Anchorage, Annual Traffic Report, 2021

²⁸ Ibid.

²⁹ Ibid.

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Figure 2-10
Anchorage Bowl Street Classifications



RIGHT-OF-WAY STANDARDS

Facility Type	Street Class	Number of Lanes	Minimum ROW Width	Average Daily Traffic
FREEWAY	V	variable	150'	over 40,000
EXPRESSWAY	IV	4-6	130'	over 20,000
MAJOR ARTERIAL	III	4	100'	over 20,000
	IIIA	4-6	130'	over 20,000
	IIIC	4	60'	over 20,000
MINOR ARTERIAL	II	2-4	80'	10,000 - 20,000
	IIA	2-4	60'	10,000 - 20,000
COLLECTORS	I	2	80'	2,000 - 10,000
	IA	2-4	80'	2,000 - 10,000
	IB	2	70'	2,000 - 10,000
	IC	2	60'	2,000 - 10,000

Source: AO 2014-63, June 2014

Municipality of Anchorage
Community Development Department
Planning Division
Transportation Planning Section
4700 Elmwood Road
Anchorage, AK 99507
(907) 343-7991



Source: Municipality of Anchorage, Official Streets and Highways Plan, 2014.

The Airport access roads are owned by the DOT&PF³⁰ except for Northern Lights Boulevard up to where the name changes to Point Woronzof at Postmark Drive. The posted speed limits³¹ on each Airport access roads are listed below.

- West International Airport Road – 20 / 35 / 50 miles per hour (mph)
 - Speed limit reduced to 35 mph west of Postmark Drive and further reduced to 20 mph entering the terminal curbside
- Postmark Drive - 35 mph
- Northern Lights Boulevard / Point Woronzof Drive - 35 mph
- Jewel Lake Road - 40 mph
- Raspberry Road - 40 / 45 mph
 - Speed limit reduced to 40 mph west of Sand Lake Road

Various traffic studies have been conducted to determine the Levels of Service (LOS) for the traffic flows on the roadways based on their designs and lane capacities. AMATS has defined various Levels of Service ranging from LOS A (uncongested) to LOS F (saturated conditions). A LOS of 'C' or better is considered to be an acceptable level of service and an LOS of 'D' is approaching the capacity for the roadway/intersection. The LOS of traffic at the West International Airport Road and Jewel Lake Road intersection is 'C' in the AM hours and 'D' in the PM hours³².

For future Airport planning efforts, the Anchorage Bowl 2025 Long-Range Transportation Plan recommended the following projects to improve traffic conditions on roadways near the Airport.

- Create an at-grade separation of West International Airport Road at Postmark Drive to improve circulation and access
- Construct an interchange at West International Airport Road and Jewel Lake Road incorporating grade separation of the railroad
- Construct a grade separation of West International Airport Road near Northwood Street with a realignment of the railroad to the south side of West International Airport Road to improve circulation, access, and freight movement

In addition, the MOA recommended that the Airport prepare an "Airport Street Master Plan" to address roadway conditions and traffic issues within Airport property. As part of the WADP, the MOA recommended that the following items be evaluated in the "Airport Street Master Plan":

- Continued restriction of trucks on West Northern Lights Boulevard

³⁰ Anchorage Metropolitan Area Transportation Study, Anchorage Bowl 2025 Long-Range Transportation Plan, 2005.

³¹ Municipality of Anchorage, Annual Traffic Report, 2021

³² Anchorage Metropolitan Area Transportation Solutions (AMATS), Status of the System, 2016

- Maintain adequate capacity on Raspberry Road
- Maintain bicycle access on Postmark Drive
- Reconfigure the Sand Lake Road and Raspberry Road intersection after the South Airpark build-out

Public transit bus service is provided by People Mover, which is a division of the MOA Public Transportation Department. People Mover provides service to the Airport via two routes. Route 40 connects the Airport to downtown Anchorage via Spenard Road. Route 40 operates with 15-minute headways on the weekdays and 20-minute headways on the weekends, as of May 2024³³. Route 65 connects the Airport to the Dimond Center shopping plaza via Jewel Lake Road and Dimond Boulevard. Route 65 with 30-minute headways on the weekdays and 60-minute headways, as of May 2024³⁴

As identified in the AMATS 2040 Metropolitan Transportation Plan, the MOA has been encouraging alternative, non-motorized modes of travel on top of public transit, but additional infrastructure improvements are necessary. Plans to encourage non-motorized modes of transportation, such as walking and bicycling, are documented in the MOA Non-Motorized Transportation Plan, which includes the 1997 Area-Wide Trails Plan, Anchorage Pedestrian Plan (adopted 2007), and the 2010 Anchorage Bicycle Plan. In the vicinity of the Airport, Jewel Lake and Raspberry roads have been identified as part of the core bicycle network. Non-core roads have been identified on West International Airport Road between Northwood Drive and Spenard Road.

The recreational areas around the Airport contain a large network of paved and unpaved multi-use trails. The majority of these trails are located south of the Airport. Some of the more popular trails near the Airport include the Tony Knowles Coastal Trail (Coastal Trail), paved areas around Lake Hood, and the extensive network of trails at Kincaid Park. Popular trails on Airport property include portions of the Coastal Trail and trails near Kincaid Park and Connor's Bog. According to the 2022 Municipality of Anchorage Annual Traffic Report, monthly use of the Coastal Trail through Earthquake Park on the north side of the Airport reached nearly 25,000 bicyclists and exceeded 15,000 pedestrians in June 2022, which was the busiest month of that measuring station for the year.

Passenger rail service is operated and managed by the Alaska Railroad Corporation. The rail line enters the Airport along West International Airport Road and terminates at the Bill Sheffield Alaska Railroad Depot located near the Rental Car Center and the public parking garage. The placement of the rail depot at the Airport offers unique opportunities to connect the air and rail

³³ Municipality of Anchorage Website, <https://www.muni.org/Departments/transit/PeopleMover/Pages/Route40Schedule.aspx>, 2024.

³⁴ Municipality of Anchorage Website, <https://www.muni.org/Departments/transit/PeopleMover/Pages/Route65Schedule.aspx>, 2024.

transportation systems. The International Airport Road transportation corridor joins the main north-south rail line that connects the Intermodal Center in Ship Creek at the north end of the MOA to Seward, which is located approximately 130 miles south of Anchorage. Currently, the rail line is used primarily by passengers who arrive on seasonal cruise ship charters. This is most common during the summer months. Several trains operate during the day. The routes have been expanding recently and reach as far north as Fairbanks and as far south as Seward³⁵. The proposed expansion is consistent with Anchorage 2020's policy to tie Anchorage to outlying communities with commuter rail and intermodal transit (Policy 30a).

2.3.6 Freight Movement Areas

Approximately 90% of freight entering the Anchorage MSA does so via ocean freighters at the Don Young Port of Alaska located northeast of the Airport³⁶. Goods are then distributed primarily by truck along the Glenn and Seward highways as well as along West International Airport Road, Minnesota Drive, and Tudor Road. Regional truck traffic is anticipated to increase in the future commensurate with projected growth in freight activity. Freight is also transported via rail operated by the Alaska Railroad Corporation.

The remaining 10% of freight entering the Anchorage MSA occurs mostly at the Airport. Freight that enters the Airport is typically express freight. Air freight is moved off aircraft and transported to distribution centers via trucks along dedicated truck routes. These routes include Postmark Drive, Lake Hood Drive, West International Airport Road, Old International Airport Road, Raspberry Drive, and Jewel Lake Drive. Northern Lights Boulevard is not identified as a truck route as it passes through residential communities.

2.3.7 Compatibility

Compatibility issues addressed in this section include land use / zoning, height restrictions, noise, and nearby recreational areas surrounding the Airport. These issues are frequently raised during discussions between the Airport and local residents and businesses surrounding the Airport. Many of the issues are voiced because they pertain to the safety of air navigation for pilots and the surrounding community. Other concerns include quality of life issues raised by residents and businesses, such as aircraft engine noise, or the preservation of recreational areas and natural buffer areas between the Airport and nearby homes and businesses.

2.3.7.1 Land Use / Zoning Surrounding the Airport

The MOA surrounds the Airport. Land uses within the Airport property are determined and controlled by the DOT&PF. Land uses and zoning surrounding Airport property are determined

³⁵ <https://www.alaskarailroad.com/ride-a-train/route-map/denali-star>

³⁶ Municipality of Anchorage, Traffic Department and Anchorage Metropolitan Area Transportation Study, *Freight Mobility Study*, 2001.

and controlled by the MOA. The Anchorage 2040 Land Use Plan Map was adopted in 2017 and it depicts the comprehensive future use of all land within the Municipality. The 2040 Land Use Plan Map is depicted in **Figure 2-11**.

The portion of the MOA that is closest to the Airport is known as the West Anchorage area. The last update to the West Anchorage land uses was completed and documented in the 2012 WADP, with the MOA posting the Anchorage 2040 Land Use Plan in 2016. The WADP Land Use Plan Map is depicted in **Figure 2-12**.

Within the West Anchorage Planning Area, most of the land area owned by the MOA is set aside for the Airport (33%). The remaining land uses are: residential (22%), parks and open space (17%), railroad or other rights-of-way (11%), and vacant (6%)³⁷. Other facilities in the Anchorage Bowl and West Anchorage include the Asplund Wastewater Treatment Facility to the northwest and FAA institutional lands to the south.

The zoning map dictates generally what can be built within the MOA per Title 21 of the Anchorage Land Use Planning Code. It is depicted in **Figure 2-13**. Similar to the land use breakdown, residential uses within the West Anchorage Planning Area comprise the largest land use component with approximately 37%, followed by air-transportation related uses at 33%, and public and institutional lands at 19%.

The Airport is zoned as a Transition District (T). Per the Planning Code, the Transition District includes suburban and rural areas that are not developing and are not expected to develop in the immediate future along definite land use lines because of their location in relationship to other development, topography, or soil conditions. The Planning Code also contains a zoning overlay district that restricts the height of structures adjacent to the Airport for safety reasons. Future revisions of Title 21 should consider, in conjunction with the DOT&PF, establishing the Airport as a separately defined zoning district. This would allow potential development standards and Airport influence overlay zones (e.g., noise, height, and land uses) to be created. Influence zones relating to aviation development and development in areas surrounding the Airport would help to ensure compatibility between the Airport and the surrounding community.

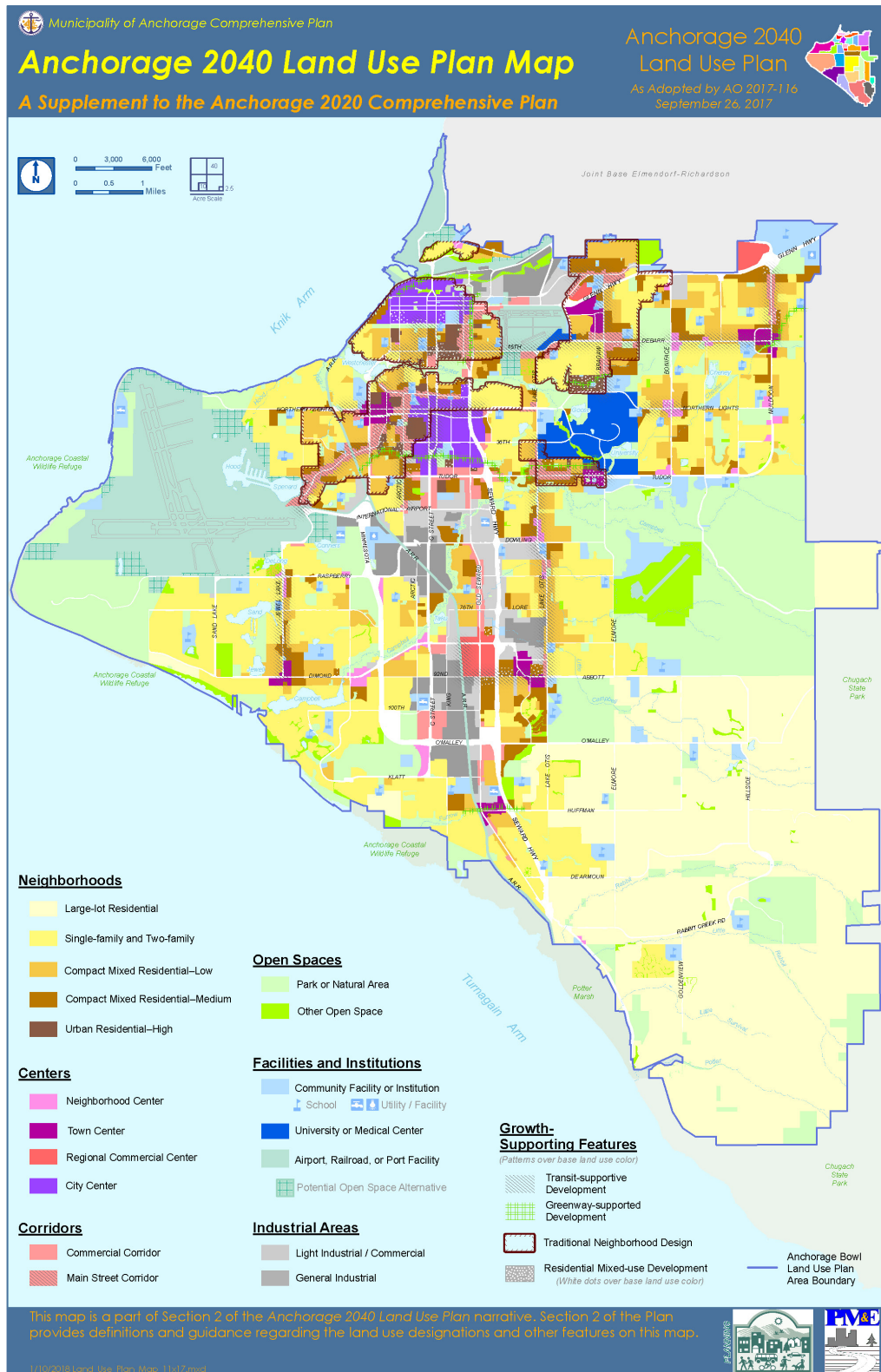
It should be noted that parts of the Anchorage District are designated as wetland areas. These areas are discussed in detail in **Section 2.9.14**.

³⁷ Municipality of Anchorage and URS Corporation, *West Anchorage District Plan*, 2012.

As the Airport and region continue to grow, compatibility concerns related to land use and activities at the Airport and surrounding areas need to be considered. Prudent actions must be taken to ensure the continued safe and efficient operation of the Airport as well as to maintain the well-being of the residents and businesses within the MOA and State of Alaska.

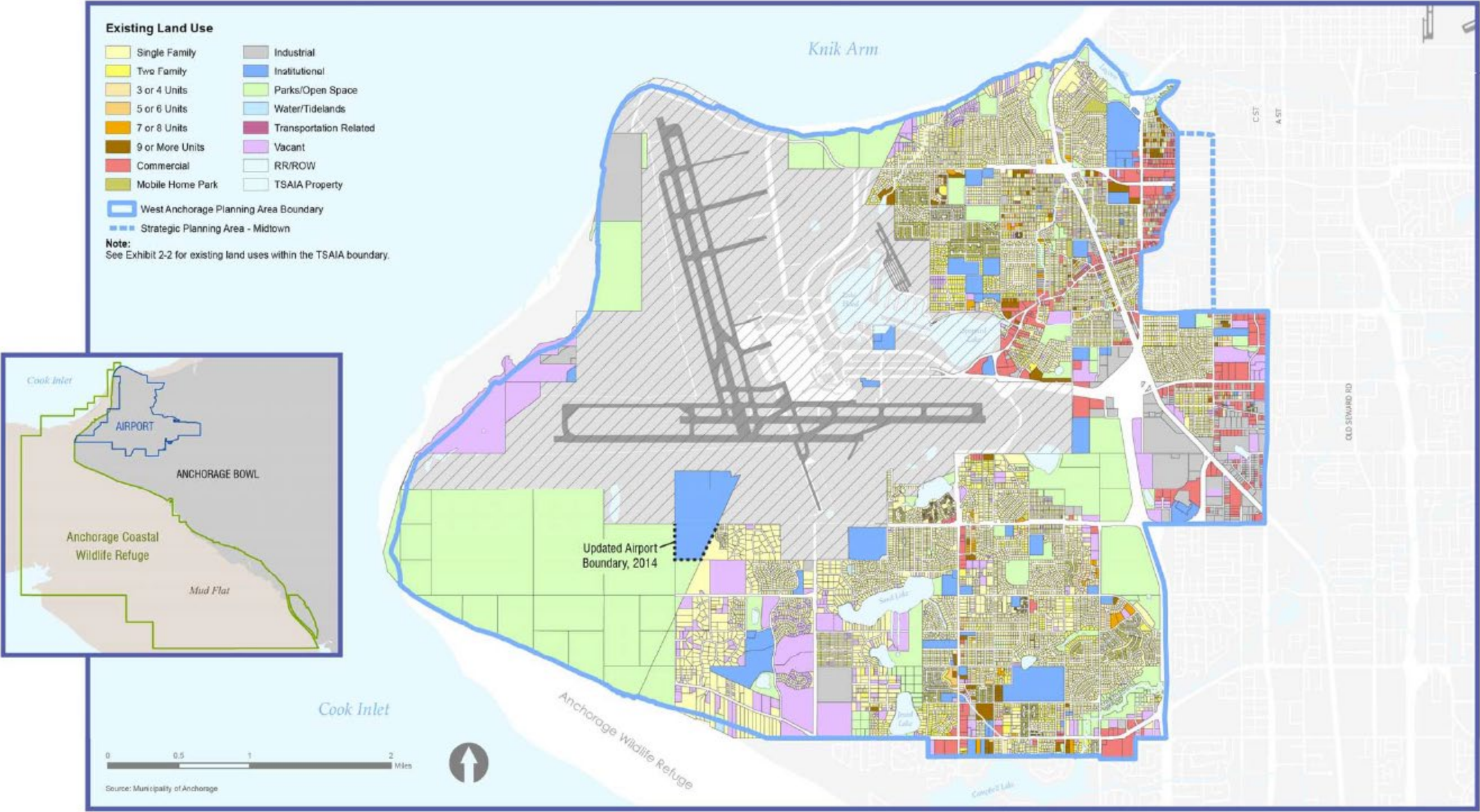
Ted Stevens Anchorage International Airport Airport Master Plan Update

Figure 2-11
Anchorage 2040 Land Use Plan Map



Source: Municipality of Anchorage, *Anchorage 2040 Land Use Plan*, 2017

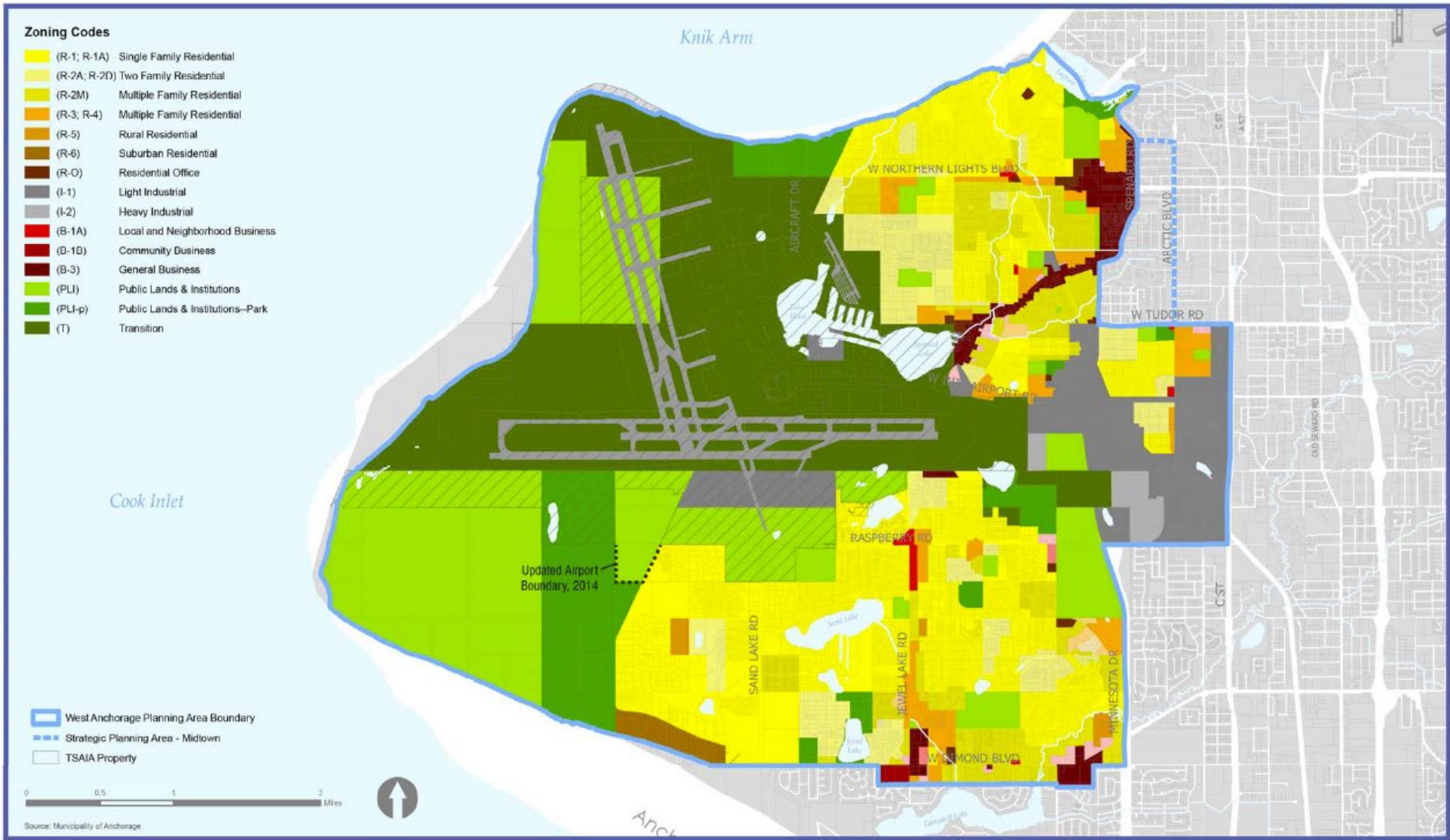
Figure 2-12
WADP Land Use Plan Map



Source: Municipality of Anchorage and URS Corporation, *West Anchorage District Plan*, 2012.
Notes: ROW = Right-of-Way, TSAIA = Ted Stevens Anchorage International Airport.

<https://www.muni.org/Departments/OCPD/Planning/Publications/Documents/Anchorage%202040%20Land%20Use%20Plan/Anchorage%202040%20LUP-Section2.pdf>

Figure 2-13
Zoning Map



Source: Municipality of Anchorage and URS Corporation, *West Anchorage District Plan*, 2012.
Note: TSAIA = Ted Stevens Anchorage International Airport.

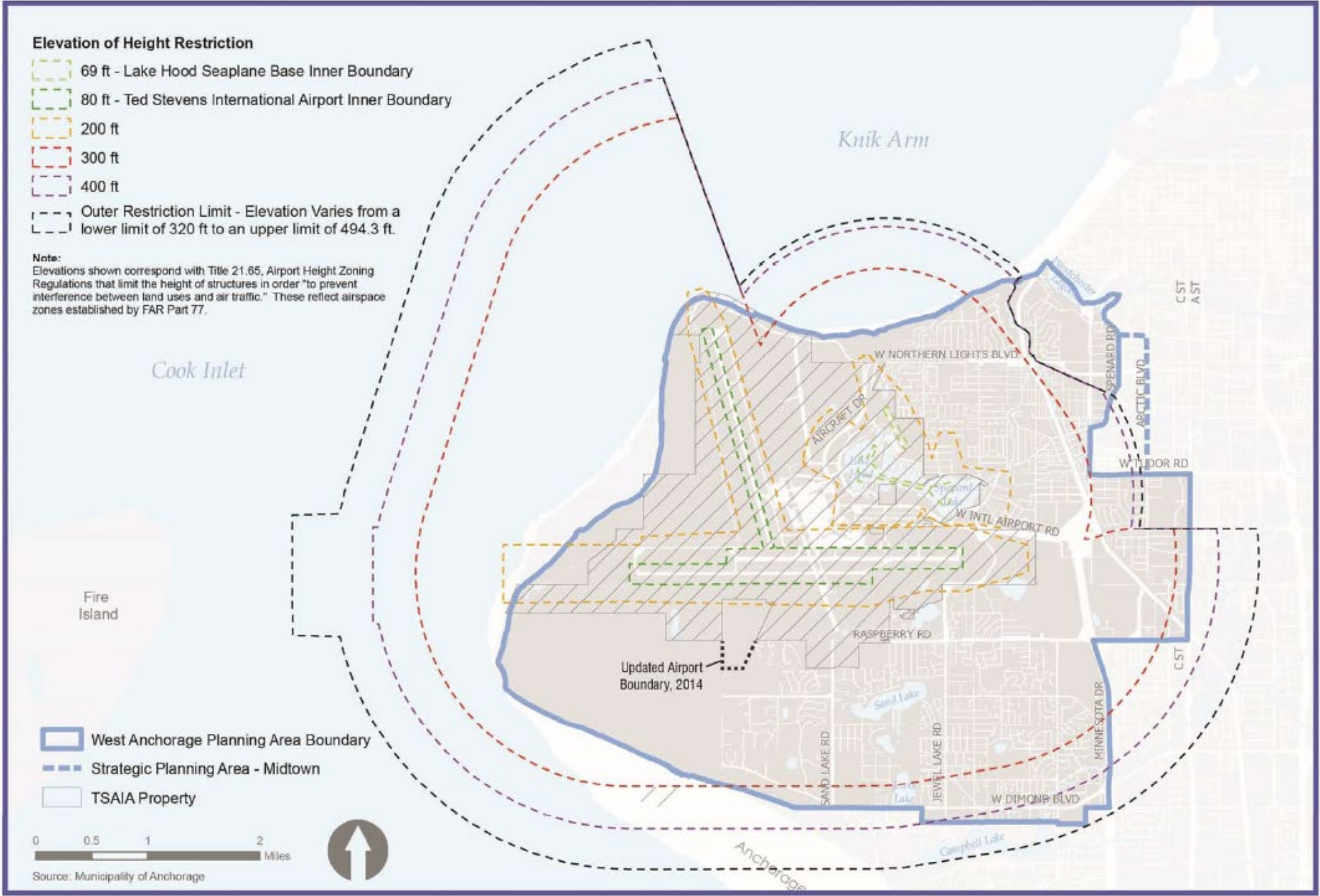
To address existing and potential future compatibility concerns, the MOA conducted the WADP (adopted by the Anchorage in 2012). The purpose of the WADP effort was to develop a 20-year strategic implementation plan. The WADP is a formal element of Anchorage 2020, which was succeeded by the Anchorage 2040 Land Use Plan in 2016. The WADP documents the zoning and land use of the West Anchorage Planning Area, the land development history, including land uses and ownership, as well as past measures taken to resolve potential land use conflicts. Through a series of workshops with community stakeholders, the WADP process developed a general public policy plan that reflects the vision of residents, landowners, and public entities for future growth in West Anchorage. The plan includes recommendation of a viable land transfer between the State of Alaska and MOA to address the Airport and stakeholder concerns regarding land uses surrounding the Airport. The land transfer would effectively change the Airport property boundary.

This section summarizes the research and findings of the WADP, Anchorage 2020, and other known related efforts to evaluate and promote compatibility between the Airport and its surrounding areas. Further discussions regarding the compatibility issues are addressed in subsequent sections of the Master Plan Update document. It should be noted that the purpose of the Master Plan Update is not to recommend an appropriate compatibility plan. Rather, it acknowledges the recommendations made in the WADP and ensures that those recommendations are carried forward into the master plan alternatives development efforts.

2.3.7.2 Airport Height Restrictions

The MOA adopted the FAA Part 77 imaginary surfaces as its airspace zones in Title 21, Chapter 65, "Airport Height Zoning Regulations." These zones regulate the permitted heights of new development around the Airport. The purpose of these restrictions is to prohibit buildings from being built too high, which may pose an obstruction to air navigation. In general, building heights cannot exceed 35 feet or the height established on the airport height overlay map, whichever is greater. In addition, any building exceeding 200 feet above a federally established airport reference point requires FAA approval. The building height restrictions as established by the MOA for areas outside the Airport property boundary are depicted in **Figure 2-14**. The Airport, MOA, and FAA are working continuously to evaluate and update the height restriction map.

Figure 2-14
Height Restriction Map



Source: Municipality of Anchorage and URS Corporation, *West Anchorage District Plan*, 2012.
Note: TSAIA = Ted Stevens Anchorage International Airport.

2.3.7.3 Noise

One of the most commonly raised issues by residents living near the Airport, and by residents living near airports generally, is aircraft noise. The DOT&PF completed an FAA Part 150 Noise Compatibility Study Update in 2015 to assess the effects that aircraft noise has on the communities surrounding the Airport. The previous Part 150 Study was completed in 1998. The Part 150 Study, as defined on the Part 150 Study website, is "... the FAA approved requirements for determining noise levels in areas near the airport. The Part 150 study process has two steps: 1) establishment of Noise Exposure Maps, which identify the levels of airport noise in areas around the airport, and 2) development of a Noise Compatibility Program designed to reduce the number of people and/or incompatible land uses within the airport's noise contours."³⁸

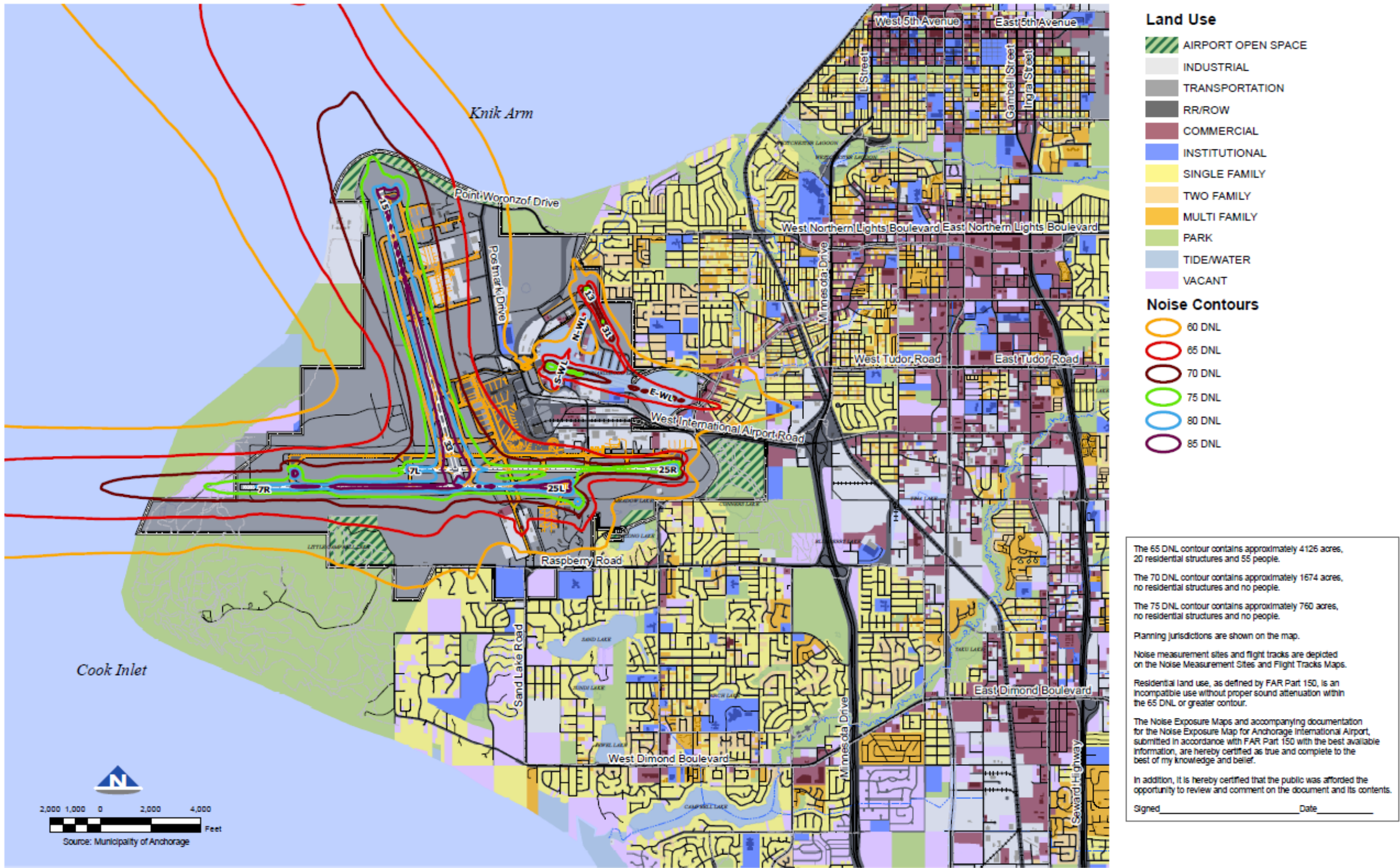
As part of the Noise Compatibility Program for the Airport, the land use and noise abatement recommendations of the Part 150 Study and other related noise studies are implemented³⁹. The Airport measured airport noise with specialized equipment, catalogued community noise complaints, and solicited comments from the community to measure noise, identify noise sources, and determine noise control methods. The Airport has continuously taken several actions to mitigate noise impacts. A Residential Sound Insulation Program (RSIP) was implemented using FAA and Airport funds to insulate over 700 homes built prior to 1998 within the 65 to 70 Day-Night-Average-Sound-Level (DNL) noise contour. In addition, the Airport installed a Flight Track & Noise Management System to monitor and measure aircraft flight tracks and noise. The Airport has also established a procedure to track and respond to noise complaints.

The noise exposure maps developed during the Part 150 studies show various contours based on the average annual DNL. The 2009 noise contours, developed as part of the 2015 Part 150 Noise Compatibility Study, were approved by the FAA in 2015. The 2009 contours are depicted in **Figure 2-15** along with the land use map at the time the study was completed. The projections for noise contours for the year 2020 and 2030 are depicted in **Figure 2-16** and **Figure 2-17**.

Sound levels are generally highest during the summer months when aviation activity at the Airport, as well as at the Lake Hood Airport and the many airports within the metropolitan area, is highest.

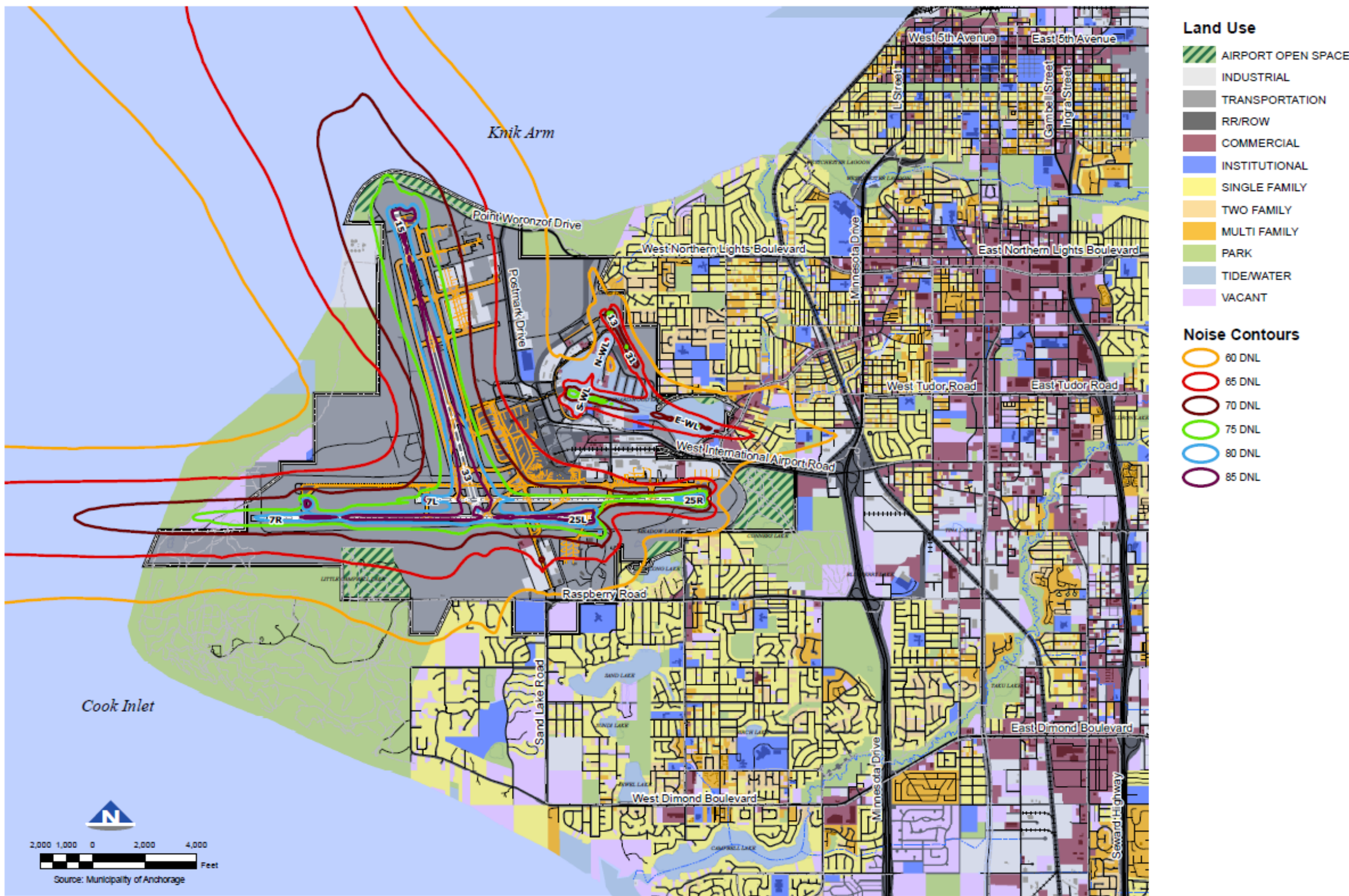
³⁸ Ted Stevens Anchorage Airport Part 150 Study, ANC Airport Website, 2022.
<https://dot.alaska.gov/anc/business/noise/compatibility/compatibilityStudy.pdf>

Figure 2-15
2009 Noise Exposure Map



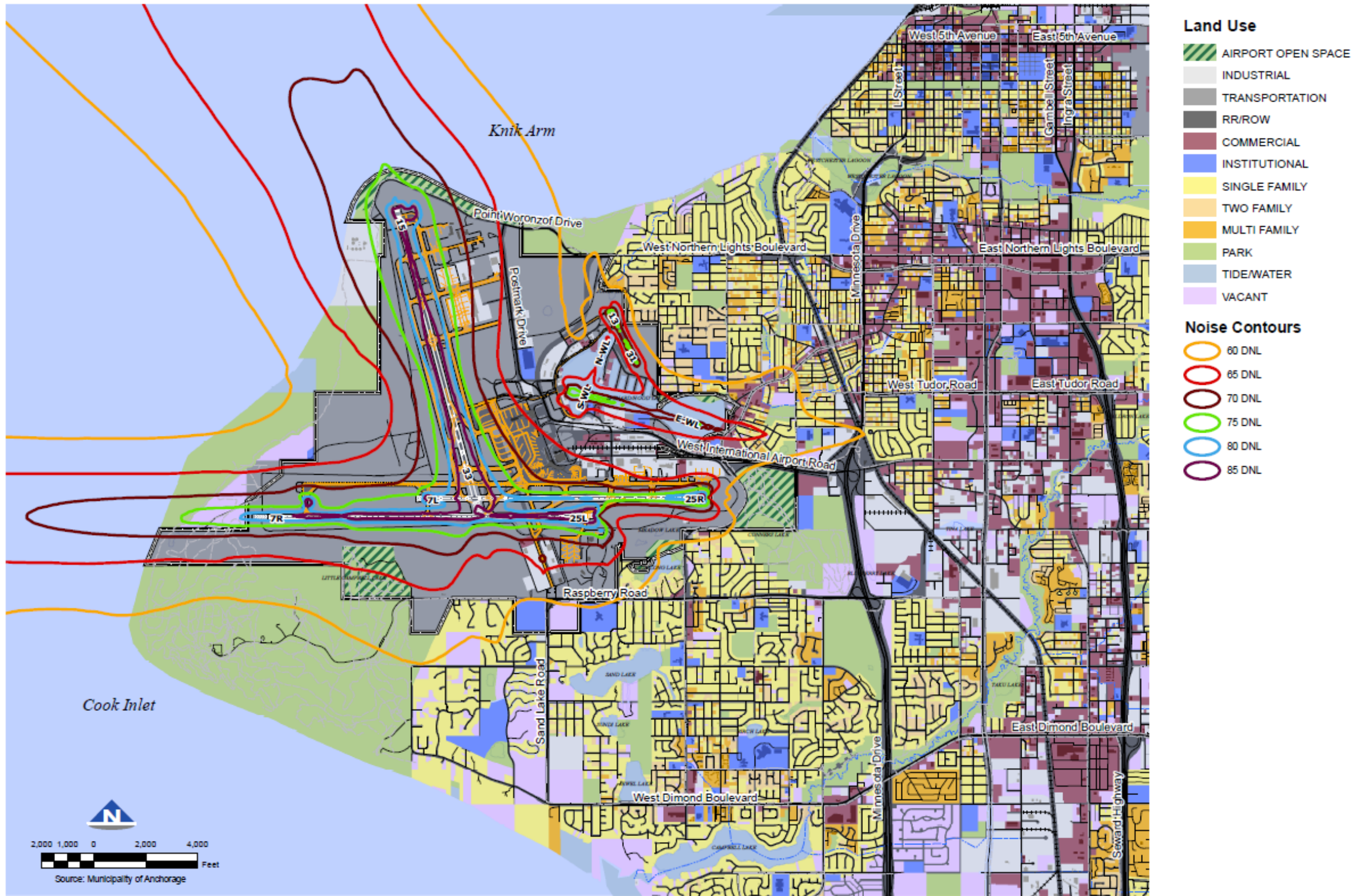
Source: Ted Stevens Anchorage Airport Part 150 Study, ANCAirport Website, 2022. <https://ancairport.com/download/2015-noise-compatibility-study-update/?wpdmdl=3431&refresh=623e923511f7a1648267829>

Figure 2-16
2020 Forecast Noise Contours



Source: Ted Stevens Anchorage Airport Part 150 Study, ANC Airport Website, 2022. <https://ancairport.com/download/2015-noise-compatibility-study-update/?wpdmdl=3431&refresh=623e923511f7a1648267829>

Figure 2-17
2030 Forecast Noise Contours



Source: Ted Stevens Anchorage Airport Part 150 Study, ANCAirport Website, 2022. <https://ancairport.com/download/2015-noise-compatibility-study-update/?wpdmdl=3431&refresh=623e923511f7a1648267829>

2.3.7.4 Recreational and Open Space

Various recreation and open space areas exist within and surrounding the Airport. Where recreational uses are allowed within Airport property, temporary maintenance agreements, which permit temporary recreational use, were entered into between the Airport and MOA. All but one of these agreements are now expired. However, the Airport continues to allow month-to-month use for recreational purposes until such future time that aviation demand necessitates the land be used for Airport development, or until a viable resolution to ensure long-term use can be achieved. The various recreation and open space areas on and surrounding the Airport are depicted in **Figure 2-18**.

Tony Knowles Coastal Trail

Access to the coast has always been a long-term community goal. It was first documented in the 1979 Coastal Management Plan. As a result, the Coastal Trail was developed in the early 1980s to provide coastline access from downtown Anchorage. The Coastal Trail meanders through Anchorage neighborhoods, around the Airport, along the coastline, and finally to Kincaid Park, located south of the Airport. Trailheads are located along the Coastal Trail at:

- Earthquake Park
- Near the intersection of Postmark Drive and Point Woronzof Drive
- Just north of the Point Woronzof Drive and Hutson Drive intersection
- Several locations within Kincaid Park

The Coastal Trail is used frequently by pedestrians, cross-country skiers, and bicyclists. It is maintained by the MOA.

Portions of the Coastal Trail run through Airport property. These portions are permitted through easements and Airport maintenance agreements, which were negotiated between the Airport and MOA. Some of these easements and agreements are not permanent. One maintenance agreement (contract ADA-30118) between the State of Alaska and MOA allows for temporary use of Airport property for the public trail with an understanding that the property could be used for aviation purposes in the future. The contract has no expiration date but can be terminated by either party with 90 days' notice. Some of these trails are shown on the latest FAA conditionally approved Airport Layout Plan as belonging to an Airport "buffer" area where a future use has not specifically been defined. Advocates of the Coastal Trail would like to see the temporary easement renegotiated to create a permanent easement or to transfer the trail lands and associated greenbelt from the State of Alaska to the MOA.

Ted Stevens Anchorage International Airport Airport Master Plan Update

Figure 2-18
Existing Parks and Open Space



Source: Municipality of Anchorage and URS Corporation, West Anchorage District Plan, 2012
Note: TSAIA = Ted Stevens Anchorage International Airport

Earthquake Park

Earthquake Park is located north of the Airport along Northern Lights Boulevard and Aircraft Drive. The park is the site where the 1964 9.2- magnitude earthquake caused the landmass supporting the Turnagain neighborhood to slide into the ocean. Approximately 75 homes were destroyed in the earthquake. Park amenities include picnic areas, a walking trail, and various informative signs about the earthquake incident.

Kincaid Park

Kincaid Park is located south of the Airport and is one of the largest parks in the West Anchorage Planning Area. In addition to the abundant natural open space, amenities include recreational trails, various overlook areas, a stadium, archery field, and soccer fields. Trails adjacent to Kincaid Park are located on Airport property. Recreational uses in this area are allowed temporarily via a short-term maintenance agreement. The Coastal Trail begins north along the coastline and passes through Airport property and Kincaid Park. Raspberry Road, which is located on the northeast portion of Kincaid Park, provides vehicle access to the park. Portions of the access road are located on Airport property. Vehicle access to Kincaid Park is not available from the west side of the park.

Little Campbell Lake / Little Campbell Lake Beach

Little Campbell Lake, also referred to as Beer Can Lake, is located on airport property south of Runway 7R-25L and northeast of Kincaid Park. The State of Alaska granted permission to use the area for recreation in May 1973.⁴⁰ A new maintenance agreement was signed in January 1995 between the State of Alaska and the Municipality of Anchorage where the State of Alaska acknowledges the recreational value of the land surrounding Little Campbell Lake and has granted access to the public in exchange for the Municipality maintaining the land.

The Municipality has requested the State of Alaska renew the agreement or incorporate more of the surrounding land into the agreement on multiple occasions since 1995; however, the State of Alaska has denied these requests because permanent recreational use of the land conflicts with the Airport's long-term land use plan. The land area is designated for future Airport development under the current FAA-approved Airport Layout Plan. Agreeing to a new and/or expanded agreement is not in the best interest of the State of Alaska given the conflict with the land use plan and given the possibility the public may perceive the land will remain recreational when it is reserved for future Airport development.

Point Campbell Park

Point Campbell Park is located north of the approach end of Runway 7R. It is accessible only by the Coastal Trail.

⁴⁰ Municipality of Anchorage Website, <https://www.muni.org/Departments/parks/Pages/LittleCampbellLakeBeach.aspx>

Point Woronzof

Point Woronzof is the geographical area located north of the Airport and includes a parking area and overlook. The Coastal Trail passes through Point Woronzof. Many people frequent Point Woronzof to photograph aircraft and the natural scenery.

Section 2.9.4.1 includes a description of historic erosion of Point Woronzof and ongoing attempts to resolve the issue.

Point Woronzof Park

Point Woronzof Park, not to be confused with Point Woronzof, is located west of the Airport and south of the Asplund Wastewater Treatment Facility which is operated by the Anchorage Water and Wastewater Utility (AWWU). Point Woronzof Park was originally owned by the Heritage Land Bank. The property was exchanged in 1995 as part of a land transfer agreement between the Heritage Land Bank, the Airport, and the Anchorage School District. In the arrangement approved by the Anchorage Assembly, the Airport agreed to convey 40 acres of Airport property at the southwest corner of Caravelle Drive and Raspberry Road to the Anchorage School District to build a new elementary school in the Sand Lake area. In exchange, 130-acres of land owned by the Heritage Land Bank west of the Airport were transferred to the Airport. In the same land exchange agreement, 191 acres of Heritage Land Bank land was transferred to the Parks and Recreation Department. The area that was transferred to the Parks and Recreation Department became Point Woronzof Park. The Coastal Trail goes through Point Woronzof Park as well as a portion of Airport land located just south of the park.

Connor's Bog / Connor's Lake Park

Connor's Bog / Lake Park is located near the east end of the Airport's parallel runways. Airport land adjacent to Connor's Bog / Lake Park is temporarily being used as a parking lot and for access to Connor's Bog.

Lake Hood Airport Public Walking Route

One of the more popular walks for residents living near the Airport is a public walking route around Lakes Hood and Spenard. Although members of the public are allowed access to the lakefront to view aircraft, safety concerns exist regarding the interaction of pedestrians, vehicles, and aircraft. Residents and visitors occasionally walk onto the active taxiways and access roads. To address pedestrian safety issues, a Lake Hood Pedestrian Study was completed in 2010 and a gateway / signage / pathway plan was implemented in 2011. The Airport currently maintains the walking route.

Spenard Lake Beach

Spenard Lake Beach is located on the north side of Spenard Lake at the Lake Hood Airport. Amenities include a picnic area and playground.

The beach area was originally used in the early 1900s as a resort and swimming area. The City of Anchorage purchased the beach area in August 1934 from the federal government (Patent No. 1071292). The beach was then passed to the State of Alaska in October 1975 as part of the condemnation for the operation of Lake Hood Airport. The continued use of the area as a beach or recreational area was not a part of the transfer agreements. The MOA was compensated for the land in the final judgment (Civil Action 73-2351, Book 4, Page 66, Anchorage Recording District). When the Lake Hood Airport was transferred to Airport ownership, the land area became subject to FAA grant assurances. At that time, the DOT&PF and MOA signed a maintenance agreement, which expired in 1992, to temporarily use Spenard Lake Beach as a public beach until it should be needed for aviation development. The maintenance agreement is now in a month-to-month holdover status. The picnic area is the former Lions Club Picnic Area located at the northwest corner of Spenard Lake. The Anchorage Lions Club operated the picnic area between 1995 and 1998. The Airport currently maintains the picnic area.

DeLong Lake Park

DeLong Lake Park is located southeast of the Airport and is accessible by Jewel Lake Road. Amenities include picnic areas, toilet facilities, and a small boat dock. It is a popular location for lake fishing. Just north of DeLong Lake Park, within the Airport property, is the Meadow Lake area. It is considered a temporary park and recreation area.

Natural Buffers

The Airport is surrounded by natural, undeveloped land areas. Although not set in any formal agreement, many of these areas are considered by the MOA and local residents as natural buffers between the Airport and other residential, developed, or undeveloped areas. These natural buffers include Turnagain Bog and wooded areas along Point Woronzof Drive, Raspberry Road, and the Kulis Business Park. Many residents living near the Airport would like to see these natural buffers remain.

Although the Airport land area is State-owned, Turnagain Bog has specific limitations on its development. Section 5 of Anchorage Ordinance 2000-151 (S-2), adopted by the Anchorage Assembly, states any proposed development on natural portions of Turnagain Bog can occur only after a master plan is prepared jointly by the Airport and MOA and approved by the Anchorage Assembly after public hearing.

Assembly Memorandum 928-2000 (A-2) indicates that the Airport will establish a 55-acre scenic easement area (or natural buffer) along its boundary with the Turnagain neighborhoods. There are differing opinions regarding whether the ordinance is legally binding upon the Airport, and this matter will need further determination.

Anchorage Coastal Zone

The MOA dedicated the Anchorage Coastal Zone / Designated Recreation Areas to preserve the coastal habitats and maintain public access to coastal areas. Areas within the Anchorage Coastal Zone include Kincaid Park and the Coastal Trail.

Anchorage Coastal Wildlife Refuge

The Anchorage Coastal Wildlife Refuge is located along the Cook Inlet coastline of the West Anchorage Planning Area, with the greatest expanse of the Wildlife Refuge located south of the Airport.

2.4 Airport Land Use

A focus of the ANC Airport Master Plan Update (Master Plan Update) identified at the outset of the master planning process by Airport management staff was a desire to better understand the on-Airport land area and uses. This understanding will help Airport management and planning staff be better equipped at managing Airport land assets, maximizing property availability for aviation development through efficient and compatible planning, and making appropriate strategic decisions to accommodate future growth demands. The ultimate purpose is to ensure adequate land is available to support air transportation requirements for the 20-year planning horizon and beyond.

Several events or reasons prompted the need for a more in-depth land use effort. In February 2011, the Kulis Air National Guard Base was vacated and the 176th Wing of the Alaska Air National Guard moved to Joint Base Elmendorf-Richardson (JBER). The 2011 Kulis Land Use Plan included a market assessment for potential development of the Kulis Business Park. Redevelopment of much of the Kulis Business Park has occurred as a result of that planning study.

In July 2012, the MOA adopted the West Anchorage District Plan (WADP) as a formal element of the Anchorage 2020: Anchorage Bowl Comprehensive Plan. In the WADP, several land transfer options between the MOA and the Airport were explored in response to stakeholder requests to protect public recreational areas and accommodate future Airport growth. Transfer of land between the MOA and the Airport has not occurred as of June 2024. However, the WADP land transfer options may be revisited at a later date.

The Airport Layout Plan was updated as part of the Master Plan Update. The Airport Layout Plan is a set of drawings that present a graphic representation of the existing facilities and planned development of an airport. Such a plan is required by the FAA for an Airport Sponsor to be awarded a grant and its associated funds for airport development. An understanding of airport land uses is necessary in order to update two of the drawings required in the Airport Layout Plan: the Land Use Drawing, and Exhibit "A" Property Map. The Land Use Drawing shows the existing and future on-Airport land uses. The Exhibit "A" Property Map shows the Airport parcels and includes information pertaining to the Airport Sponsor's acquisition or release of Airport parcels, as well as details of any associated FAA obligations.

Section 2.4 includes an explanation of the FAA grant assurances or obligations the Airport must abide by to continue to receive federal funding for Airport development projects. In addition, the section includes an inventory of the various land use categories. Three land use categories are described and defined: 1) land uses by functional area, 2) land uses by geographic area, and 3) land uses for the purpose of leasing agreements.

2.4.1 FAA Grant Assurances

FAA obligations occur in the form of grant assurances, which are placed on airports as a condition of receiving funds offered through FAA administered airport financial assistance programs. These include distribution of grants through programs such as the FAA Airport Improvement Program (AIP) and revenue generated from Passenger Facility Charges (PFC). Grant assurances are either included in AIP grants or specifically incorporated by reference. Grant assurances require that airports safeguard compatible land use surrounding the airport, pursue self-sustainability, and / or regulate how airport revenue is used. The obligations accepted under each grant program or conveyance document may vary.

Obligations are also attached to airport land that is acquired through federal property transfers. In these cases, restrictive covenants are placed on property deeds that require airport land to be used for specific aeronautical purposes. The covenants generally last for as long as the property is owned and operated as an airport. These obligations also regulate the sale or disposal of federally acquired property. If sale or disposal is approved by the FAA, fair-market value is generally required. The FAA enforces grant assurance obligations to protect its investment in, and the integrity of, the national air transportation system. The goal is to protect the public interest in civil aviation and ensure compliance with applicable federal regulations. The FAA enforces these obligations through its Airport Compliance Program. Additional information about the Program can be obtained from the FAA website as well as in FAA Order 5190.6B Change 3, Airport Compliance Manual, and FAA Order 5100.38D Change 1, Airport Improvement Program Handbook.

2.4.2 On-Airport Functional Land Use Categories

The Airport also has a Land Use Plan for on-Airport property. Land use categories were identified and defined by functional area in the 2014 Master Plan Update and depicted in the 2016 Airport Layout Plan. The land uses and their definitions are listed below.

- **International Cargo** – The International Cargo land use classification includes Airport lands related to the accommodation of facilities for the handling and processing of international air cargo and air mail including apron areas for the loading, unloading, maintaining, and servicing of international cargo aircraft with direct airfield access.

Example facilities and activities include, but are not limited to, international cargo processing, transitional warehousing, hangar facilities, apron space, and remain overnight cargo aircraft parking positions for air carriers operating through Anchorage between the Lower 48 States and international destinations.

Tenants and facilities in this classification are differentiated from Domestic Cargo in that the aircraft and cargo operations associated with this classification originate or terminate outside of

the United States. Also, International Cargo operations typically utilize larger aircraft (e.g., wide-body jets) and occupy larger cargo processing and transitional warehouse facilities.

Uses in this classification are deemed compliant with the FAA's definition of Aeronautical use.

- **Domestic Cargo** – The Domestic Cargo land use classification includes Airport lands related to the accommodation of facilities for the handling and processing of domestic air cargo and air mail including apron areas for the loading, unloading, maintaining, and servicing of domestic cargo aircraft with direct airfield access. Domestic Cargo encompasses activities classified as Regional Cargo and Other Domestic Cargo.

Example facilities and activities include, but are not limited to, domestic cargo processing, transitional warehousing, hangar facilities, and apron space for air carriers operating within Alaska or between Anchorage and the Lower 48 States.

Tenants and facilities in this classification are differentiated from International Cargo in that the aircraft and cargo operations associated with this classification typically originate and terminate within Alaska and the Lower 48 States. Also, Domestic Cargo operations typically utilize smaller aircraft (e.g., turboprops and narrow-body jets) and occupy smaller cargo processing and transitional warehouse facilities.

Uses in this classification are deemed compliant with the FAA's definition of Aeronautical use.

- **Aircraft Aeronautical** – The Aircraft Aeronautical land use classification includes Aeronautical activities, other than International Cargo and Domestic Cargo, which require direct aircraft access to the airfield. This land use classification includes Airport lands related to the accommodation of facilities for maintenance and storage of aircraft, aircraft parking, and flight operations.

Example facilities and activities include, but are not limited to, full service FBOs, aircraft fuel services, condo-style aircraft hangars, air ambulance operations, and small commercial or private aircraft operations.

Uses in this classification are deemed compliant with the FAA's definition of Aeronautical use.

- **Other Aeronautical** – The Other Aeronautical land use classification includes Airport lands related to the accommodation of facilities that do not require direct aircraft access to the airfield and are in support of the maintenance and operations of aircraft and the Airport.

Example facilities and activities include, but are not limited to, ground handling services, airfreight forwarding which receives and sends 100% of its freight to and from the Airport via aircraft, aircraft parts sales, bulk fuel storage serving the hydrant fueling system and mobile fueling services fueling operations. Also included in this classification are facilities required to operate the

Airport such as Aircraft Rescue and Fire Fighting, air traffic control tower, airfield maintenance, airport facility maintenance, airport maintenance equipment yards, airport material storage, and airport snow storage.

Uses in this classification are deemed compliant with the FAA's definition of Aeronautical use.

- **Domestic Cargo / Aircraft Aeronautical** – This classification allows Domestic Cargo and Aircraft Aeronautical development as previously defined.
- **International Cargo / Domestic Cargo** – This classification allows International Cargo and Domestic Cargo development as previously defined.
- **International Cargo / Domestic Cargo /Other Aeronautical** – This classification allows International Cargo, Domestic Cargo, and Other Aeronautical development as previously defined.
- **Airfield** – The Airfield land use classification includes the area used for the runway and taxiway system and other pavement areas within the area where aircraft may taxi, takeoff, or land as well as apron areas where aircraft may park. It also includes land areas where airfield lighting and navigational aids (NAVAIDs) may be located.
- **Nonaeronautical** – The Nonaeronautical land use classification includes all uses of the Airport that are not used for Aeronautical purposes as previously defined. The land uses in this classification are nonaeronautical commercial uses that are not required to be located at an airport for the business to operate. The maximum lease term for Nonaeronautical development is 35 years.

Areas designated as Nonaeronautical do not exclude Aeronautical use activities; Aeronautical users may lease within any area designated as Nonaeronautical. An Aeronautical user takes priority over a Nonaeronautical user in consideration of a lease.

Example facilities and activities include but are not limited to; freight forwarding (any forwarder that does not receive or send 100% of its freight via aircraft); car rental facilities, rental of vehicles that will not fit in the rental car facility; in-flight catering kitchens, restaurants; retail establishments; vehicle storage; manufacturing / testing / assembly; warehousing; U.S. Post Office; and administrative and corporate offices. Utility facilities are also Nonaeronautical.

Other Aeronautical / Nonaeronautical – This classification allows Other Aeronautical and Nonaeronautical development as previously defined. Applications for Aeronautical Support developments are prioritized over Nonaeronautical.

- **Passenger Terminal and Landside** – The Passenger Terminal and Landside land use classification includes the area that is necessary for the main passenger terminal and related activities that is

located within the passenger terminal envelope generally comprising the passenger terminal building and the airport loop road. It also includes associated passenger terminal landside facilities including public and employee parking, access and circulation roadways, passenger terminal curbside, ground transportation and commercial vehicle, rental car, and other transit / rail facilities. Portions of the passenger terminal and landside area may be considered Aeronautical or Nonaeronautical based on tenant use.

Passenger carriers include air carriers that transport passengers on a commercial basis. These passenger carriers 1) hold an Air Carrier Certificate or Operating Certificate issued by the FAA, or 2) hold the appropriate permits for foreign air carrier operation issued by the U.S. Department of Transportation. These passenger air carriers also may operate on a scheduled, chartered, or on-demand basis. See Part 121, Part 129, and Part 135 of Chapter 14 of the Code of Federal Regulations for more information.

- **Future Airport Development** – The Future Airport Development land use classification includes Airport land areas that are vacant or have not yet been categorized as another land use but are reserved for potential airport development.
- **Land Acquisition** – The Land Acquisition land use includes areas not currently owned by the Airport which may need to be acquired to support the safe and efficient operation of the Airport. Land acquired by the Airport would be classified as a specific use at the time of acquisition.
- **Department of Military and Veterans Affairs Land Management Agreement** – Areas operated by the State of Alaska, Department of Military and Veterans Affairs under an Interagency Land Management Agreement.

2.4.3 On-Airport Geographic Land Use Categories

In addition to the functional land use categories, the Airport property area can be divided into several land use categories based on geographic areas. The Airport is made up of several geographic areas that are commonly known to Airport staff and tenants. These geographic areas, depicted in **Figure 2-19**, are as follows:

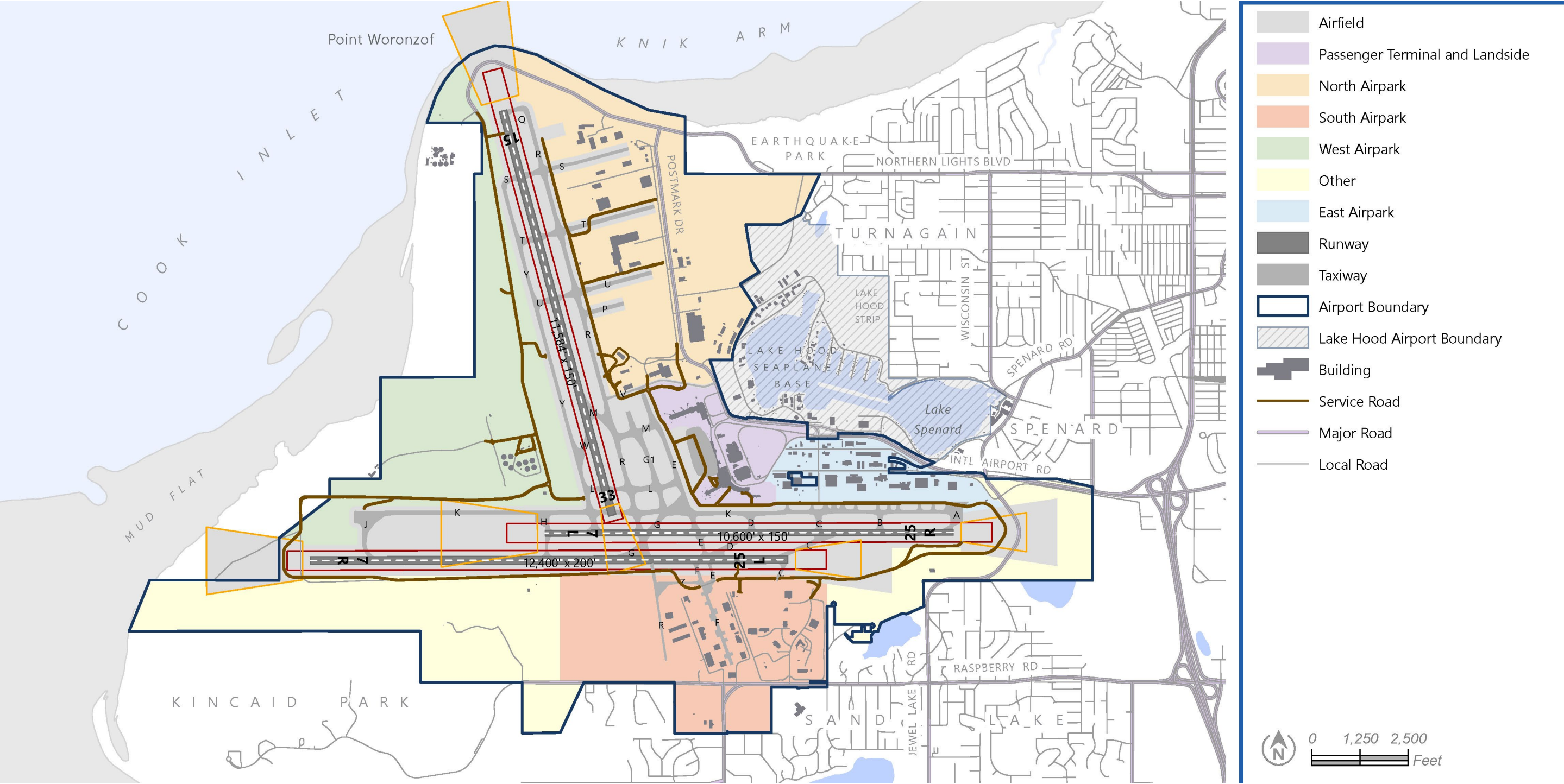
- North Airpark
- East Airpark
- South Airpark
- West Airpark
- Airfield Area
- Passenger Terminal and Landside Area
- Other Areas

The “Passenger Terminal and Landside Area” is the area typically bounded by the Airport loop road pertaining to the passenger terminal building and landside facilities. It does not include other passenger and landside facilities that are situated in the airparks. Examples include the airline administrative offices and the rental car maintenance and storage lots located in the East Airpark

“Other Areas” pertain primarily to areas currently undeveloped for Airport use. They also include temporary recreational areas located within the Airport property boundary.

For the purposes of this Master Plan Update, the geographic land use categories are referenced through the planning process but will not be shown on the Airport Land Use Map in the Airport Layout Plan.

Figure 2-19
On-Airport Geographic Land Uses



2.4.4 On-Airport Leasing Land Use Categories

A third land use category is used for the purposes of leasing Airport property out to the Airport's various tenants and specifically the lease rates. This land use category is not necessarily directly correlated to the functional land use categories previously presented. However, in general, the majority of the functional land use categories, with the exception of facilities in the "Other" and "Undeveloped Airport Land" categories, are used for aeronautical purposes.

Land use categories based on leasing rates are based on defined land use classifications in Title 17, Chapter 45, Rural Airports of the Alaska Administrative Code (July 2017), which are based on FAA classifications on what airport property may be considered aeronautical (aviation-use) or non-aeronautical (non-aviation use). The Airport has identified three land use categories based on leasing rates: Aviation Use, Auxiliary Use, and Non-Aviation Use, listed in increasing order of their lease rates. Each of these land use categories based on leasing are defined below as included in the *Alaska Administrative Code*.

2.4.4.1 Aviation Use

(A) Means a business, service, or other function that directly involves, or is necessary for, the normal operation of aircraft that use an airport.

(B) Includes the following:

- (i) Aircraft loading, unloading, tie-down, parking, storage sales, service, rental, maintenance, or repair
- (ii) Sale or storage of aviation fuel and aviation petroleum products
- (iii) Pilot flight training
- (iv) Air charter or air taxi service
- (v) Airport terminal building
- (vi) Air carrier operations
- (vii) Aircraft ground handling
- (viii) Aircraft parts sales
- (ix) Air traffic control tower, air navigation aid, and aviation weather instrumentation

2.4.4.2 Auxiliary Use

(A) Means a business, service, or other function that is neither an aviation use nor a non-aviation use and is located and carried out on an airport for the convenience of the air traveling public, aviation businesses on the airport, or the employees necessary to the maintenance and operation of an airport.

(B) Includes the following:

- (i) Air freight forwarding
- (ii) Ground transportation services not operated by the department, such as a taxicab service, an airport limousine or shuttle service, a rental car agency, or a vehicle parking business
- (iii) In-flight catering
- (iv) Hotel accommodation
- (v) In-terminal food service
- (vi) In-terminal concessions

2.4.4.3 Non-Aviation Use

(A) Means any business, service, or function that:

- (i) Is not an aviation or auxiliary use
- (ii) Is not directly or indirectly related to aviation or to the air traveling public
- (iii) Does not offer a product or service that is specifically related to aircraft operations or to air transportation
- (iv) Is located or operated to derive revenue primarily from members of the public not using air transportation services

(B) Includes a grocery store, a restaurant, cafe, food wagon, or other eating establishment not within a department-owned terminal, a liquor store, lumber yard, agricultural activity, golf course, automobile service station, shopping center, and bowling alley.

This document does not go into further detail regarding the land uses based on lease rates. However, the information is considered as part of the alternatives development process and particularly used to help develop a strategic approach in achieving future land use and development objectives.

2.4.4.4 Next Steps

Particularly with regard to land use, as aeronautical demand increases it is important to determine how best to develop and expand the Airport while addressing community concerns regarding the preservation of recreational areas. Many areas of Airport property that are used for recreational purposes today are granted on a temporary basis by the State of Alaska to the MOA. However, the agreements state these land areas can be used for aviation purposes should the need arise. The rights and conditions of the temporary land agreements could better serve the Airport and community with ongoing review and clarification to avoid future conflict between the Airport and community. Such determinations will require input from multiple groups to assure there is a clear understanding regarding who has authority governing property development given the need to balance Airport and community interests.

2.5 Existing Airport Facilities

The existing ANC Airport facilities and operations are described in this section. The discussion is organized by geographic (Section 2.6) and functional (Section 2.7) land use area. The approximately 4,210-acre Airport property (excludes the Lake Hood Airport) can be divided into the following geographic and functional land use areas.

- » Geographic Land Use Areas (acres)
 - North Airpark = 645
 - East Airpark = 150
 - South Airpark = 660
 - West Airpark = 570
 - Airfield = 1,475
 - Passenger Terminal and Landside = 155
 - Other = 555
- » Functional Land Use Areas (acres)
 - Airfield = 1,475
 - Passenger Terminal and Landside = 220
 - Cargo = 265
 - General Aviation = 70
 - Airport / Airline Support = 195
 - FAA = 10
 - Other = 215
 - Undeveloped = 1,760

2.5.1 Buildings/Facilities Index

For inventory efforts, a description of each airpark is presented. The facilities or buildings in the North, East, South, and West airparks are depicted in **Figure 2-20**, **Figure 2-21**, **Figure 2-22**, and **Figure 2-23**, respectively. The building numbers depicted in the above-referenced figures, along with the leaseholder and subtenant information, including lease expiration dates, are summarized in **Table 2-1**. The existing conditions data for cargo and general aviation tenants were summarized in the sections that follow.

Figure 2-20
North Airpark Building Index

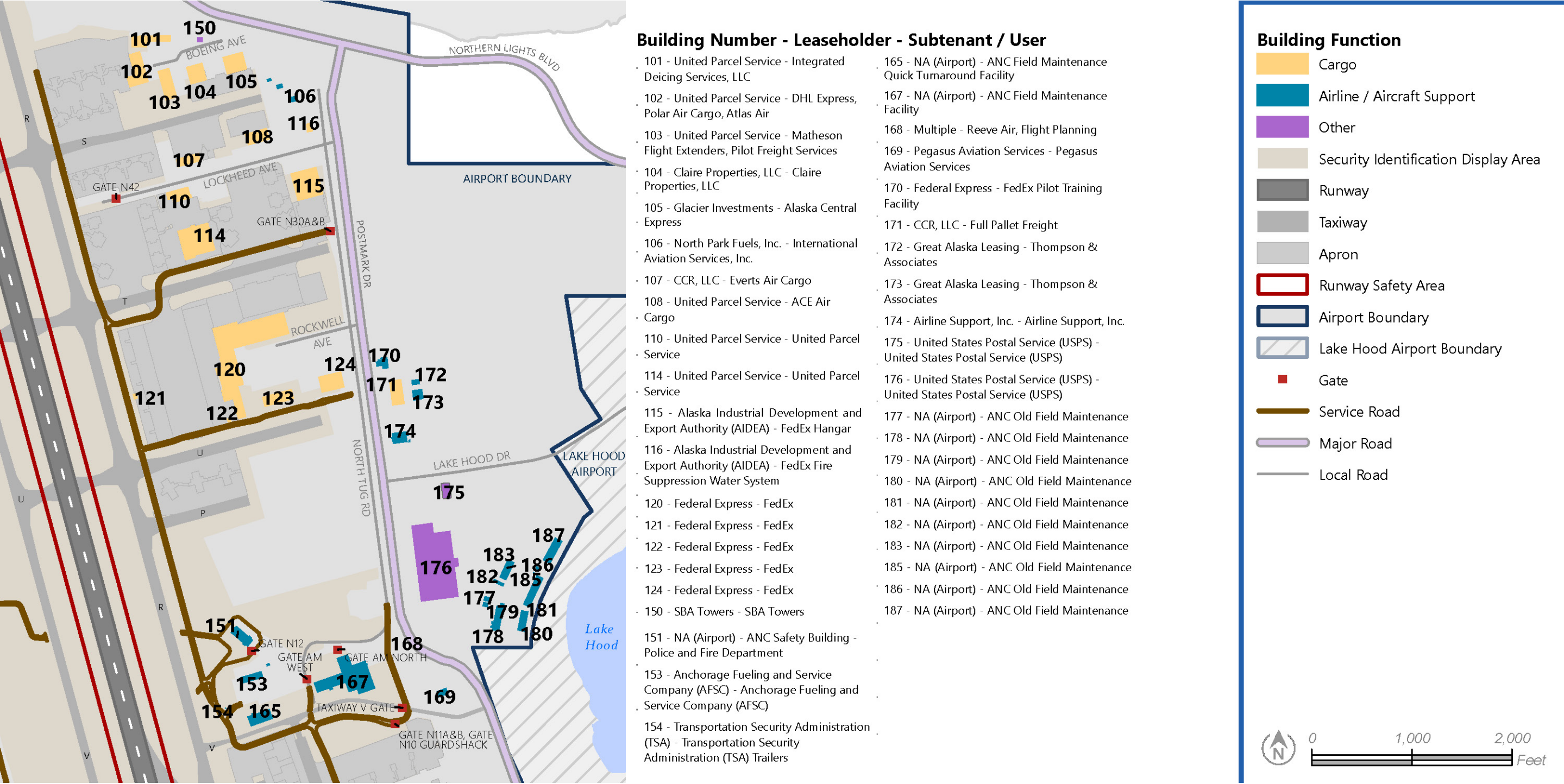


Figure 2-21
East Airpark Building Index

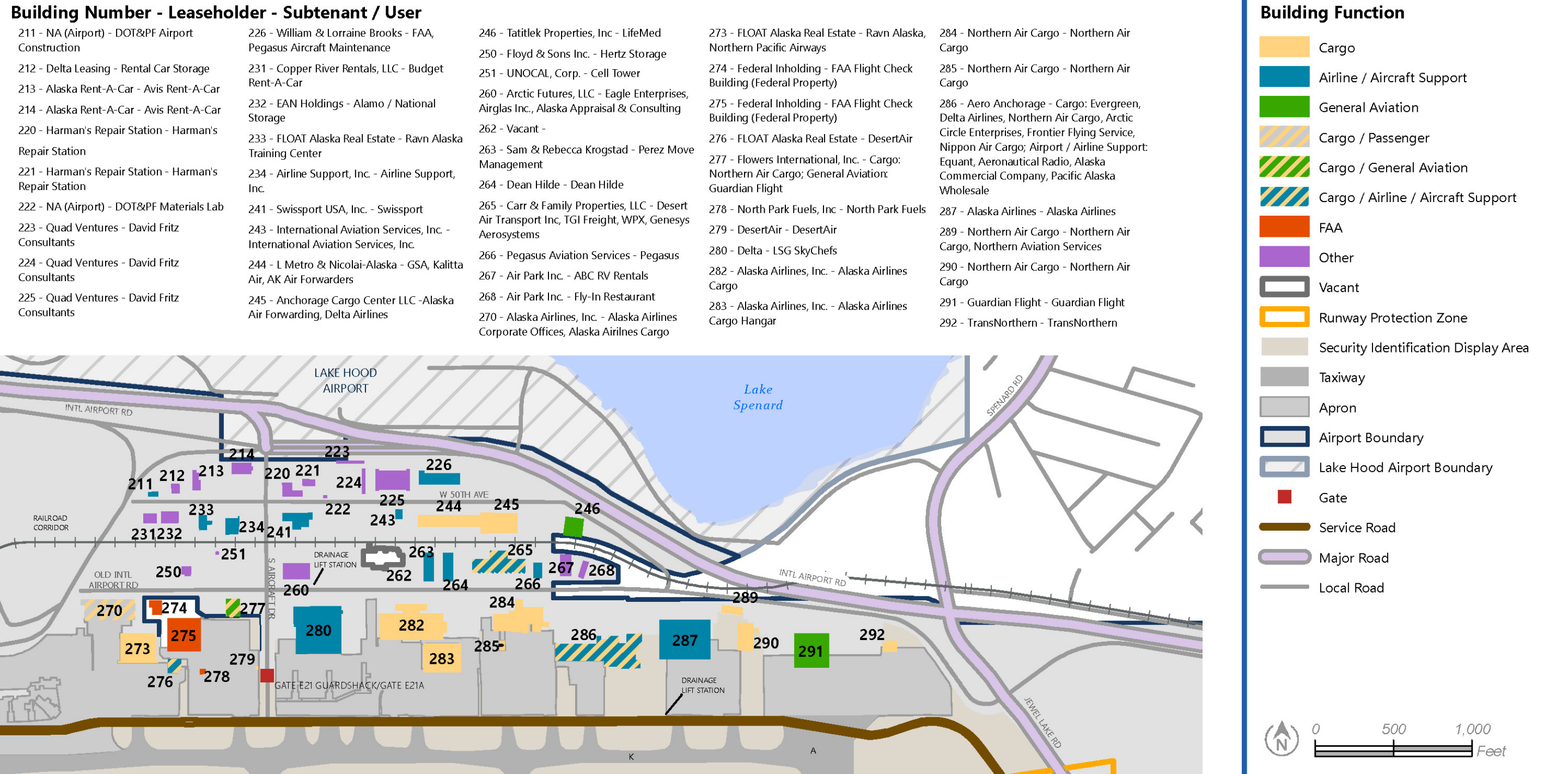


Figure 2-22
South Airpark Building Index

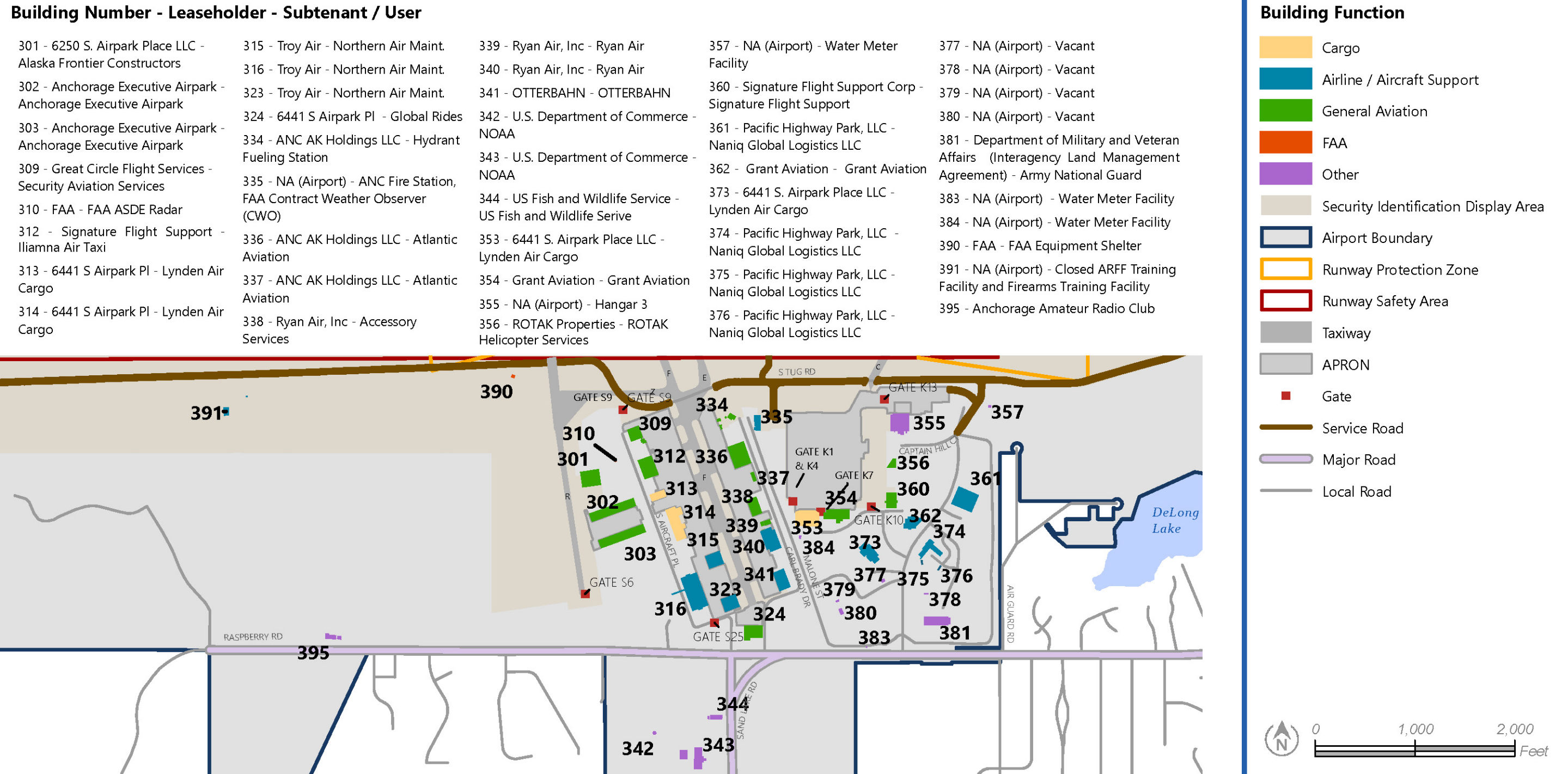
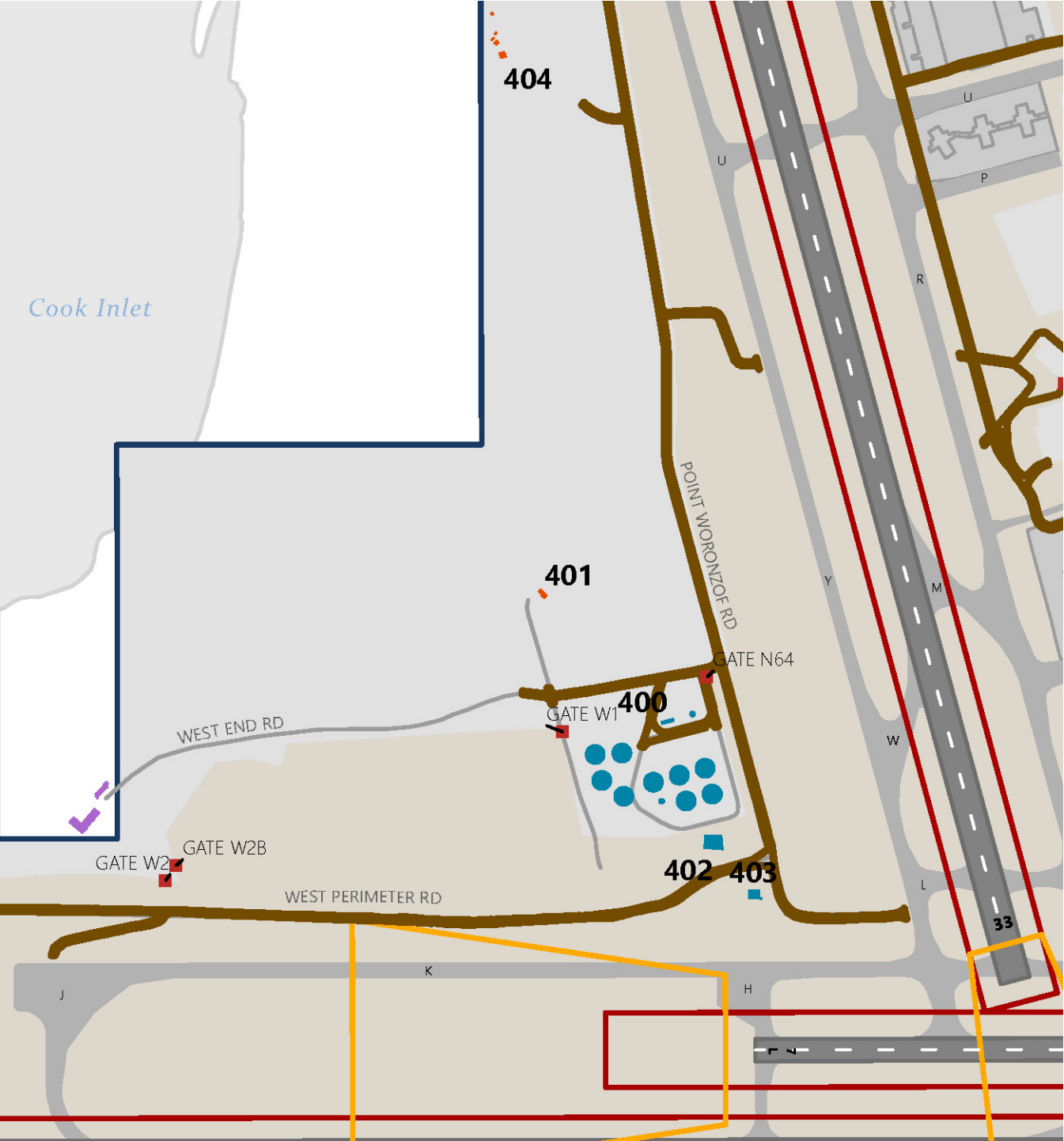


Figure 2-23
West Airpark Building Index



Building Number - Leaseholder - Subtenant / User

- 400 - Anchorage Fuel and Service Corporation (AFSC) - AFSC Fuel Storage Facility
- 401 - FAA - FAA Airport Surveillance Radar
- 402 - NA (Airport) - ANC Electrical Vault
- 403 - NA (Airport) - ANC Equipment Storage
- 404 - FAA - RTR Tower Site

Building Function

- Airline / Aircraft Support
- FAA
- Other
- Fuel Farm Tank
- Security Identification Display Area
- Runway
- Taxiway
- Apron
- Runway Protection Zone
- Runway Safety Area
- Airport Boundary
- Gate
- Service Road
- Local Road



Table 2-1
Airport Building Index

Building Index No.	Airpark	Leaseholder	Subtenant / Facility User	Number of Buildings	Number of Tanks	Building / Tank Footprint (Square Feet)
101	North	United Parcel Service	Integrated Deicing Services, LLC	1	0	31,600
102	North	United Parcel Service	DHL Express, Polar Air Cargo, Atlas Air	1	0	44,400
103	North	United Parcel Service	Matheson Flight Extenders, Pilot Freight Services	1	0	34,600
104	North	Claire Properties, LLC	Claire Properties, LLC	1	0	24,000
105	North	Glacier Investments	Alaska Central Express	1	0	33,400
106	North	North Park Fuels, Inc.	International Aviation Services, Inc.	3	0	6,500
107	North	CCR, LLC	Everts Air Cargo	1	0	18,400
108	North	United Parcel Service	ACE Air Cargo	1	0	24,300
110	North	United Parcel Service	United Parcel Service	1	0	24,700
114	North	United Parcel Service	United Parcel Service	2	0	90,800
115	North	Alaska Industrial Development and Export Authority (AIDEA)	FedEx Hangar	1	0	73,600
116	North	Alaska Industrial Development and Export Authority (AIDEA)	FedEx Fire Suppression Water System	1	1	8,200
120	North	Federal Express	FedEx	1	0	276,100
121	North	Federal Express	FedEx	1	0	1,200
122	North	Federal Express	FedEx	1	0	1,900
123	North	Federal Express	FedEx	1	0	30,000
124	North	Federal Express	FedEx	1	0	60,000
150	North	SBA Towers	SBA Towers	0	0	0
151	North	NA (Airport)	ANC Safety Building (Police and Fire Department)	1	0	19,300
153	North	Anchorage Fueling and Service Company (AFSC)	Anchorage Fueling and Service Company (AFSC)	2	0	15,800
154	North	Transportation Security Administration (TSA)	Transportation Security Administration (TSA) Trailers	~10 trailers	0	300
165	North	NA (Airport)	ANC Field Maintenance Quick Turnaround Facility	1	3	25,900
167	North	NA (Airport)	ANC Field Maintenance Facility	1	0	115,600
168	North	Multiple	Reeve Air, Flight Planning	1	0	300
169	North	Pegasus Aviation Services	Pegasus Aviation Services	1	0	6,000
170	North	Federal Express	FedEx Pilot Training Facility	1	0	9,400
171	North	CCR, LLC	Full Pallet Freight	1	0	29,800
172	North	Great Alaska Leasing	Thompson & Associates	1	0	3,900
173	North	Great Alaska Leasing	Thompson & Associates	1	0	9,700
174	North	Airline Support, Inc.	Airline Support, Inc.	1	0	15,600
175	North	United States Postal Service (USPS)	United States Postal Service (USPS)	1	0	9,200
176	North	United States Postal Service (USPS)	United States Postal Service (USPS)	1	0	273,000

Building Index No.	Airpark	Leaseholder	Subtenant / Facility User	Number of Buildings	Number of Tanks	Building / Tank Footprint (Square Feet)
177	North	NA (Airport)	ANC Old Field Maintenance	1	0	2,000
178	North	NA (Airport)	ANC Old Field Maintenance	1	0	18,700
179	North	NA (Airport)	ANC Old Field Maintenance	1	0	1,000
180	North	NA (Airport)	ANC Old Field Maintenance	1	0	14,500
181	North	NA (Airport)	ANC Old Field Maintenance	1	0	23,000
182	North	NA (Airport)	ANC Old Field Maintenance	1	0	2,800
183	North	NA (Airport)	ANC Old Field Maintenance	2	0	15,300
185	North	NA (Airport)	ANC Old Field Maintenance	1	0	200
186	North	NA (Airport)	ANC Old Field Maintenance	3	0	500
187	North	NA (Airport)	ANC Old Field Maintenance	1	0	20,300
211	East	NA (Airport)	DOT&PF Airport Construction	1	0	2,000
212	East	Delta Leasing	Rental Car Storage	1	0	3,100
213	East	Alaska Rent A Car	Avis Rent A Car	1	0	5,400
214	East	Alaska Rent A Car	Avis Rent A Car	1	0	8,800
220	East	Harman's Repair Station	Harman's Repair Station	1	0	8,200
221	East	Harman's Repair Station	Harman's Repair Station	1	0	3,500
222	East	NA (Airport)	DOT&PF Materials Lab	1	0	500
223	East	Quad Ventures	David Fritz Consultants	1	0	3,500
224	East	Quad Ventures	David Fritz Consultants	1	0	3,000
225	East	Quad Ventures	David Fritz Consultants	1	0	26,500
226	East	William & Lorraine Brooks	FAA, Pegasus Aircraft Maintenance	1	0	17,500
231	East	Copper River Rentals, LLC	Budget Rent A Car	1	0	5,000
232	East	EAN Holdings	Alamo / National Storage	1	0	7,800
233	East	FLOAT Alaska Real Estate	Ravn Alaska Training Center	1	0	5,400
234	East	Airline Support, Inc.	Airline Support, Inc.	1	0	8,500
241	East	Swissport USA, Inc.	Swissport	1	0	13,700
243	East	International Aviation Services, Inc.	International Aviation Services, Inc.	1	0	2,400
244	East	L Metro & Nicolai Alaska	GSA, Kalitta Air, AK Air Forwarders	1	0	30,000
245	East	Anchorage Cargo Center LLC	Alaska Air Forwarding, Delta Airlines	1	0	30,300
246	East	Tatitlek Properties, Inc	LifeMed	1	0	13,900
250	East	Floyd & Sons Inc.	Hertz Storage	1	0	3,300
251	East	UNOCAL, Corp.	Cell Tower			
260	East	Arctic Futures, LLC	Eagle Enterprises, Airglas Inc., Alaska Appraisal & Consulting	2	0	17,800

Building Index No.	Airpark	Leaseholder	Subtenant / Facility User	Number of Buildings	Number of Tanks	Building / Tank Footprint (Square Feet)
262	East	Vacant		1	0	25,400
263	East	Sam & Rebecca Krogstad	Perez Move Management	1	0	11,500
264	East	Dean Hilde	Dean Hilde	1	0	11,500
265	East	Carr & Family Properties, LLC	Desert Air Transport Inc, TGI Freight, WPX, Genesys Aerosystems	1	0	34,700
266	East	Pegasus Aviation Services	Pegasus	1	0	5,000
267	East	Air / Park Inc.	ABC RV Rentals	1	0	9,400
268	East	Air / Park Inc.	Fly In Restaurant	1	0	3,800
270	East	Alaska Airlines, Inc.	Alaska Airlines Corporate Offices, Alaska Airlines Cargo	2	0	39,600
273	East	FLOAT Alaska Real Estate	Ravn Alaska, Northern Pacific Airways	1	0	41,800
274	East	Federal Inholding	FAA Flight Check Building (Federal Property)	1	0	9,100
275	East	Federal Inholding	FAA Flight Check Building (Federal Property)	1	0	43,300
276	East	FLOAT Alaska Real Estate	DesertAir	4	0	7,800
277	East	Flowers International, Inc.	Cargo: Northern Air Cargo; General Aviation: Guardian Flight	1	0	9,700
278	East	North Park Fuels, Inc.	North Park Fuels, Inc.	1	0	1,100
279	East	DesertAir	DesertAir	1	0	500
280	East	Delta	LSG SkyChefs	1	0	87,700
282	East	Alaska Airlines, Inc.	Alaska Airlines Cargo	1	0	78,300
283	East	Alaska Airlines, Inc.	Alaska Airlines Cargo Hangar	1	0	44,900
284	East	Northern Air Cargo	Northern Air Cargo	1	0	44,600
285	East	Northern Air Cargo	Northern Air Cargo	1	0	2,000
286	East	Aero Anchorage	Cargo: Delta Airlines, Northern Air Cargo, Arctic Circle Enterprises, Frontier Flying Service, Nippon Air Cargo; Airport / Airline Support: Equant, Aeronautical Radio, Alaska Commercial Company, Pacific Alaska Wholesale	1	0	73,600
287	East	Alaska Airlines	Alaska Airlines	1	0	2,000
289	East	Northern Air Cargo	Northern Air Cargo, Northern Aviation Services	1	0	6,000
290	East	Northern Air Cargo	Northern Air Cargo	2	0	18,200
291	East	Guardian Flight	Guardian Flight	1	0	46,700
292	East	TransNorthern	TransNorthern	1	0	5,800
301	South	6250 S. Airpark Place LLC	Alaska Frontier Constructors	1	0	29,100
302	South	Anchorage Executive Airpark	Anchorage Executive Airpark	1	0	39,400
303	South	Anchorage Executive Airpark	Anchorage Executive Airpark	1	0	38,900
309	South	Great Circle Flight Services	Security Aviation Services	1	0	16,000
310	South	FAA	FAA Airport Surface Detection Equipment Radar	2	0	1,100
312	South	Signature Flight Support	Iliamna Air Taxi	1	0	28,000
313	South	6441 S Airpark Pl	Lynden Air Cargo	1	0	10,600

Building Index No.	Airpark	Leaseholder	Subtenant / Facility User	Number of Buildings	Number of Tanks	Building / Tank Footprint (Square Feet)
314	South	6441 S Airpark Pl	Lynden Air Cargo	1	0	37,700
315	South	Troy Air	Northern Air Maintenance	1	0	14,900
316	South	Troy Air	Northern Air Maintenance	1	0	60,400
323	South	Troy Air	Northern Air Maintenance	1	0	14,900
324	South	6441 S Airpark Pl	Global Rides	1	0	24,000
334	South	ANC AK Holdings LLC	Hydrant Fueling Station	1	~4	1,200
335	South	NA (Airport)	ANC Fire Station, FAA Contract Weather Observer (CWO)	1	0	8,500
336	South	ANC AK Holdings LLC	Atlantic Aviation	1	0	38,000
337	South	ANC AK Holdings LLC	Atlantic Aviation	1	0	1,400
338	South	Ryan Air, Inc	Accessory Services	1	0	16,900
339	South	Ryan Air, Inc	Ryan Air	2	0	3,500
340	South	Ryan Air, Inc	Ryan Air	1	0	21,800
341	South	OTTERBAHN	OTTERBAHN	1	0	21,100
342	South	U.S. Department of Commerce	NOAA	1	0	800
343	South	U.S. Department of Commerce	NOAA	2	0	23,900
344	South	US Fish and Wildlife Service	US Fish and Wildlife Service	1	0	3,300
353	South	6441 S. Airpark Place LLC	Lynden Air Cargo	1	0	36,500
354	South	Grant Aviation	Grant Aviation	1	0	25,800
355	South	NA (Airport)	Hangar 3	1	0	33,900
356	South	ROTAK Properties	ROTAK Helicopter Services			8,600
357	South	NA (Airport)	Water Meter Facility	1	0	500
360	South	Signature Flight Support Corp	Signature Flight Support	1	0	15,900
361	South	Pacific Highway Park, LLC	Naniq Global Logistics LLC	1	0	40,500
362	South	Grant Aviation	Grant Aviation	1	0	15,700
373	South	6441 S. Airpark Place LLC	Lynden Air Cargo	1	0	21,200
374	South	Pacific Highway Park, LLC	Naniq Global Logistics LLC	1	0	18,400
375	South	Pacific Highway Park, LLC	Naniq Global Logistics LLC	1	0	800
376	South	Pacific Highway Park, LLC	Naniq Global Logistics LLC	1	0	1,600
377	South	NA (Airport)	Vacant	1	0	900
378	South	NA (Airport)	Vacant	1	0	600
379	South	NA (Airport)	Vacant	1	0	400
380	South	NA (Airport)	Vacant	1	0	1,800
381	South	Department of Military and Veteran Affairs (Interagency Land Management Agreement)	Army National Guard	2	0	23,600

Building Index No.	Airpark	Leaseholder	Subtenant / Facility User	Number of Buildings	Number of Tanks	Building / Tank Footprint (Square Feet)
383	South	NA (Airport)	Water Meter Facility	1	0	600
384	South	NA (Airport)	Water Meter Facility	1	0	300
390	South	FAA	FAA Equipment Shelter	1	0	100
391	South	NA (Airport)	ARFF Training Facility, Fire Pit, and Firearms Training Facility	1	0	4,100
395	South	Anchorage Amateur Radio Club	Anchorage Amateur Radio Club	1	0	4,300
400	West	Anchorage Fuel and Service Corporation (AFSC)	AFSC Fuel Storage Facility	4	11	149,400
401	West	FAA	FAA Airport Surveillance Radar	1	0	1,800
402	West	NA (Airport)	ANC Electrical Vault	1	0	6,900
403	West	NA (Airport)	ANC Equipment Storage	1	0	5,200
404	West	FAA	RTR Tower Site	5	0	1,500

2.6 Existing Airport Facilities by Geographical Area

The Airport facilities are described in this section by geographic area or airpark.

2.6.1 North Airpark

The North Airpark is a 645-acre geographic area located north of the passenger terminal complex and east of Taxiway R. The facilities in the North Airpark are depicted in **Figure 2-20**.

2.6.1.1 Facilities

The majority of the buildings in the North Airpark are used for air cargo. The North Airpark is developed with approximately 134 acres of aircraft parking apron area; approximately 240 acres of developed buildings, leased space, and roads; and the remaining 272 acres currently undeveloped for aviation use as of June 2024. The largest facilities include the FedEx, and United Parcel Service (UPS) cargo handling facilities. All buildings within the North Airpark are listed in **Table 2-1**. Also included are the building numbers identified in **Figure 2-20**. Apron areas or lease lots without buildings are excluded. Each tenant is individually described in later sections.

2.6.1.2 Ground Access and Parking

The key roads in and around the North Airpark are Postmark Drive and Northern Lights Boulevard. Most of the North Airpark facilities can be accessed via Postmark Drive. Rockwell Avenue is a public use road that provides access to the FedEx facility from Postmark Drive. Lockheed Avenue is a public use road that provides access to the UPS, Everts Air Cargo, and ACE Air Cargo facilities from Postmark Drive. The UPS north complex is publicly accessible from Northern Lights Boulevard via Boeing Lane and Boeing Avenue. The Field Maintenance Facility, Anchorage Fueling and Services Company (AFSC) offices, and the Police and Fire Station are accessible from Postmark Drive via De Havilland Avenue. On both the secure and nonsecure side of the airfield, North Tug Road provides access between the North Airpark facilities and the passenger terminal area. This service road allows non-licensed airfield vehicles to bypass the secure service road along Taxiway R and also provides access to the U.S. Post Office. Several North Airpark tenants have raised concerns regarding the ease of crossing Postmark Drive and accessing the U.S. Post Office.

Each tenant typically provides space on its own leasehold to accommodate employee vehicle parking requirements. The only case of common-use or shared parking is the UPS north complex where the subtenants share a parking lot.

2.6.1.3 Airfield Access

Airfield access to the Security Identification Display Area (SIDA) and the Air Operations Area (AOA) where aircraft land, take off, or maneuver is provided by various tenant leaseholds and at several gates along the Airport security fence. In the North Airpark, airfield access is provided at

all facilities with the exception of the Fire Suppression Water System (Building 116). Airfield access to the SIDA is also provided via Gate N42 at the end of Lockheed Avenue as well as via Gate N30 A & B on the north side of Taxiway T where the service road meets North Tug Road alongside Postmark Drive. Finally, airfield access is provided via Gate N12 located near the Field Maintenance Facility located along De Havilland Avenue and North Tug Road.

2.6.2 East Airpark

The East Airpark is a 150-acre geographic area located north of Taxiway K, east of the passenger terminal complex, south of International Airport Road, and west of Jewel Lake Road. The facilities in the East Airpark are depicted in **Figure 2-21**.

2.6.2.1 Facilities

The East Airpark was the first area of the Airport to be developed for airline / air cargo support. By 1955, the East Airpark was the site of three large hangars and about 50,000 square yards of aircraft parking apron.

Today, the East Airpark is fully developed with approximately 248,000 square yards of aircraft parking apron and a total of 600,000 square yards of leasable space. Approximately 417,000 square yards of this leasable space along the AOA. The remaining 183,000 square yards is only accessible to / from the AOA via the Airpark's internal road system and airfield security gates.

Some of buildings fronting the AOA and elsewhere in the Airpark are 40 to 50 years old and have been repurposed—some, multiple times—in response to changes in the market and the aircraft fleet. Some East Airpark occupants indicate that conducting business in the Airpark can be challenging due to limited apron space and the expense of upgrading older buildings to meet current building codes. Several businesses conduct operations from multiple locations in the Airpark or from multiple airparks, in spite of the inefficiencies this creates, because no single location is available that meets all of their needs.

The East Airpark serves a large and diverse mix of aviation businesses including major and regional passenger airlines (Alaska Airlines and Ravn Airlines, respectively); regional all-cargo carrier (Northern Air Cargo); commuter and charter air carriers; air ambulance operators; an airline caterer; aircraft maintenance companies; and providers of passenger, apron, and cargo services. Airpark occupants also include a restaurant, vehicle rentals, law enforcement, and technical support for state and federal transportation programs. The buildings within the East Airpark are listed in **Table 2-1**. Apron areas or lease lots without buildings are excluded. Each tenant is individually described in later sections.

2.6.2.2 Ground Access and Parking

Between 1940 and 1980, what was then known as International Airport Road served as the main access to the Airport. In 1980, International Airport Road was realigned about 900 feet to the north and redesigned as a controlled access arterial providing primary access to the passenger terminal area west of the airpark. The original road alignment, now known as Old International Airport Road, continues to provide internal access to the airpark from Jewel Lake Road and South Aircraft Drive. A spur line connecting the East Airpark with the Alaska Railroad Corporation's mainline east of the Airport was constructed in the early 1950s to bring petroleum products to the Airport's bulk fuel storage facility, which was located at the west end of Old International Airport Road. The bulk fuel storage facility was removed in about 1995. In 2003, the rail spur was elevated and connected to the passenger terminal complex. Although the spur line remains at-grade for approximately 1,200 feet at the eastern end of the East Airpark, there is currently no developed rail connection to / from any leased lot. During the summer, the east end of West 50th Avenue was blocked off to allow the unimpeded flow of passenger rail cars to and from the Airport passenger terminal. In 2012, the Alaska Railroad Corporation reported carrying nearly 45,000 passengers to / from the Airport terminal.

Although the rail line provides improved passenger access to the main terminal, it no longer serves a useful function for the East Airpark. In fact, its presence somewhat reduces the utility of the East Airpark to the Airport because it impedes the ability to redesign the East Airpark to address evolving market conditions, such as realigning the internal road network and expanding lease lots. For example, a few tenants on parcels north of the rail corridor require the use of apron vehicles (e.g., tugs, deicing equipment, and cargo dollies) on the AOA. As traffic on the road network internal to the airpark grows, occupants of these lots will encounter increasing difficulty transiting the pinch point on South Aircraft Drive at the railroad overpass.

2.6.2.3 Airfield Access

Airfield access to the SIDA and AOA where aircraft land, take off, or maneuver is provided via various tenant leaseholds and at several gates along the Airport security fence. In the East Airpark, airfield access is provided only at those facilities located alongside Taxiway K. Airfield access to the SIDA is also provided via the Gate E21 Guard shack and Gate E21A at the terminus of South Aircraft Drive.

2.6.3 South Airpark

The South Airpark is a 560-acre geographic area located north of Raspberry Road and south of Runway 7R-25L and the East / West Parallel Taxiway. The facilities in the South Airpark are depicted in **Figure 2-21**.

2.6.3.1 Facilities

The original South Airpark is the area around Taxiway R and Taxiway F. The Kulis Business Park was recently added to the South Airpark. In addition, in the future the South Airpark will likely include undeveloped areas west of Taxiway R (identified as part of the “Other” geographic land use category depicted in **Figure 2-19**). Including the undeveloped areas to the west, the South Airpark comprises approximately 748 acres. A total of approximately 151 acres are developed, with the remaining 597 acres undeveloped. Portions of the undeveloped land may not be developable due to its proximity to the runway. Part of the undeveloped land is temporarily publicly accessible and temporarily used for recreational purposes. In 2014, the Airport acquired 131 acres of additional land in the west portion of the South Airpark, formally occupied by the Federal Communications Commission through a land release by the U.S. General Services Administration.

The first structures in the South Airpark were developed within the Kulis Business Park (former Kulis Air National Guard Base, which opened in the spring of 1955). Additional buildings were constructed to the west (in the area originally known as the South Airpark) and outside of the Kulis Business Park in the early 1980s. Taxiway F, formerly part of the original Runway 13-31, was established in 1980 when the runway was decommissioned. Taxiway Z and Taxiway R⁴¹ in the South Airpark were constructed in 2006 to accommodate additional growth and provide access to newly defined lease lots, located alongside Taxiway R. In 2011, Kulis Air National Guard Base was relocated to nearby Joint Base Elmendorf-Richardson (JBER), adding 129 more acres to the South Airpark. Taxiway R was extended south of Runway 7R-25L to Taxiway Z in 2024 as part of the Taxiway Z extension project. This is the point at which the north-south segment of Taxiway Z was redesignated as Taxiway R.

The South Airpark continues to grow, with new facilities being constructed as recently as 2024. Public utilities, including water / sewer, electricity, natural gas, and fiber optic cable are available at various lease lots east of Taxiway R. The water and sewer utilities within the Kulis Business Park were previously owned by the Airport but are now under the ownership of the Anchorage Water and Wastewater Utility.

The South Airpark’s aviation uses include corporate and general aviation, cargo, fixed base operators, charter passenger service, training, aircraft maintenance, and NAVAIDs. The buildings within the South Airpark are listed in **Table 2-1**. Apron areas or lease lots without buildings are excluded. Each tenant is individually described in later sections. Not shown are buildings owned by the U.S. Fish and Wildlife Service (USFWS) and ACS of Anchorage, Inc. located south of the National Oceanic and Atmospheric Administration (NOAA) buildings (Buildings 342 and 343).

⁴¹ The portion of Taxiway R south of Taxiway Z was originally also designated as Taxiway Z. The north-south taxiway segment was redesignated as Taxiway R in 2024.

2.6.3.2 Ground Access and Parking

The South Airpark is accessible via Raspberry Road. Primary access roads within the South Airpark are South Tug Road, South Airpark Place, Carl Brady Drive, and Kulis Drive. Other roads in the South Airpark include West Perimeter Road, Test Drive, Cicardo Court, Malone Street, Fox Run Way, Captain Hill Court, Freyholtz Lane, and Denali View Way. Maintenance of these roads, with the exception of Raspberry Road, is provided by the Airport.

Access to the AOA in the South Airpark is provided via the South Tug Road that connects to the tug road system at the East Airpark and extends around Runway 7R to connect to the West Airpark.

Parking in the South Airpark is located within each tenant's designated lease area. Tenants along the eastern side of South Airpark Place have limited parking and few options for additional parking. Most tenants, with the exception of Signature Flight Support, have adequate parking facilities for current use. There are two vacant lots along South Airpark Place. The FAA has determined that parking is incompatible on one lot because of potential conflicts with the Airport Surface Detection Equipment (ASDE). The other lot, while not adjacent to Signature, could be developed as additional parking for South Airpark tenants.

2.6.3.3 Airfield Access

Airfield access to the SIDA and AOA is provided via various tenant leaseholds, and at several doors and gates along the Airport security fence. Access to the Airport / apron through tenant lease areas is controlled by tenant lock and key or card reader programs. The doors and gates are controlled by locks and warning signs to prevent unauthorized entry to SIDA areas. In the Kulis Business Park, airfield access is provided at Gates K1, K4, K7, K10, and K13. In the original South Airpark area, airfield access is provided at Gates S6, S9, and S25.

2.6.4 West Airpark

The West Airpark is a 570-acre geographic area located north of Runway 7R-25L and west of Runway 15-33. The facilities in the West Airpark are depicted in **Figure 2-23**.

2.6.4.1 Facilities

With the exception of AFSC facilities and FAA equipment, the majority of the West Airpark is undeveloped. The buildings within the West Airpark are listed in **Table 2-1** and described in later sections.

2.6.4.2 Ground Access and Parking/Airfield Access

The West Airpark is accessible from north of the Airport via Point Woronzof Drive and West Perimeter Road. West End Road and the SIDA access gate (Gates N63 and N64) are located at the terminus of Point Woronzof Drive. The public can access West End Road. The entrance to

the AFSC fuel farm is located just past the intersection of Point Woronzof Drive and West End Road. The fuel farm is gated to prevent trespassing. West End Road runs west and terminates near the Taxiway K and Runway 7R ends, just outside the Airport property boundary. At the terminus of West End Road at the Airport property boundary, a smaller road branches off to the south to an area that is temporarily used as a construction staging area. Access to this on-Airport area is restricted via Gates W2 and W2B. West End Road continues west and just past the Airport property line. The road branches off into service roads leading to a few facilities that are used by personnel who manage the Tony Knowles Coastal Trail.

Past the terminus of Point Woronzof Drive and the SIDA access Gate N63 and B64 heading south, Point Woronzof Drive turns into the West Access Road and then into the West Perimeter Road. The West Perimeter Road, or the service road, travels around the end of Runway 7L and 7R towards the South Airpark and around to the passenger terminal area and North Airpark. Secure access to the West Airpark will need to be considered in future development plans as there is currently no secure service road connecting the North Airpark to the West Airpark from the north. To access the West Airpark from the north, service vehicles currently use the publicly accessible Point Woronzof Drive

2.7 Existing Airport Facilities by Functional Area

The ANC Airport facilities are described in this Section by functional area.

2.7.1 Airfield

This section describes the Airport airfield facilities, which include the runways, taxiways, aprons, aircraft parking areas, NAVAIDs and lighting within the airfield area as defined in Section 2.7, Existing Airport Facilities by Functional Area. The airfield area consists of approximately 1,475 acres and is depicted in **Figure 2-24**. Any deficiencies in airfield design standards per FAA AC 150 / 5300-13B, Airport Design, are also identified.

2.7.1.1 Runways

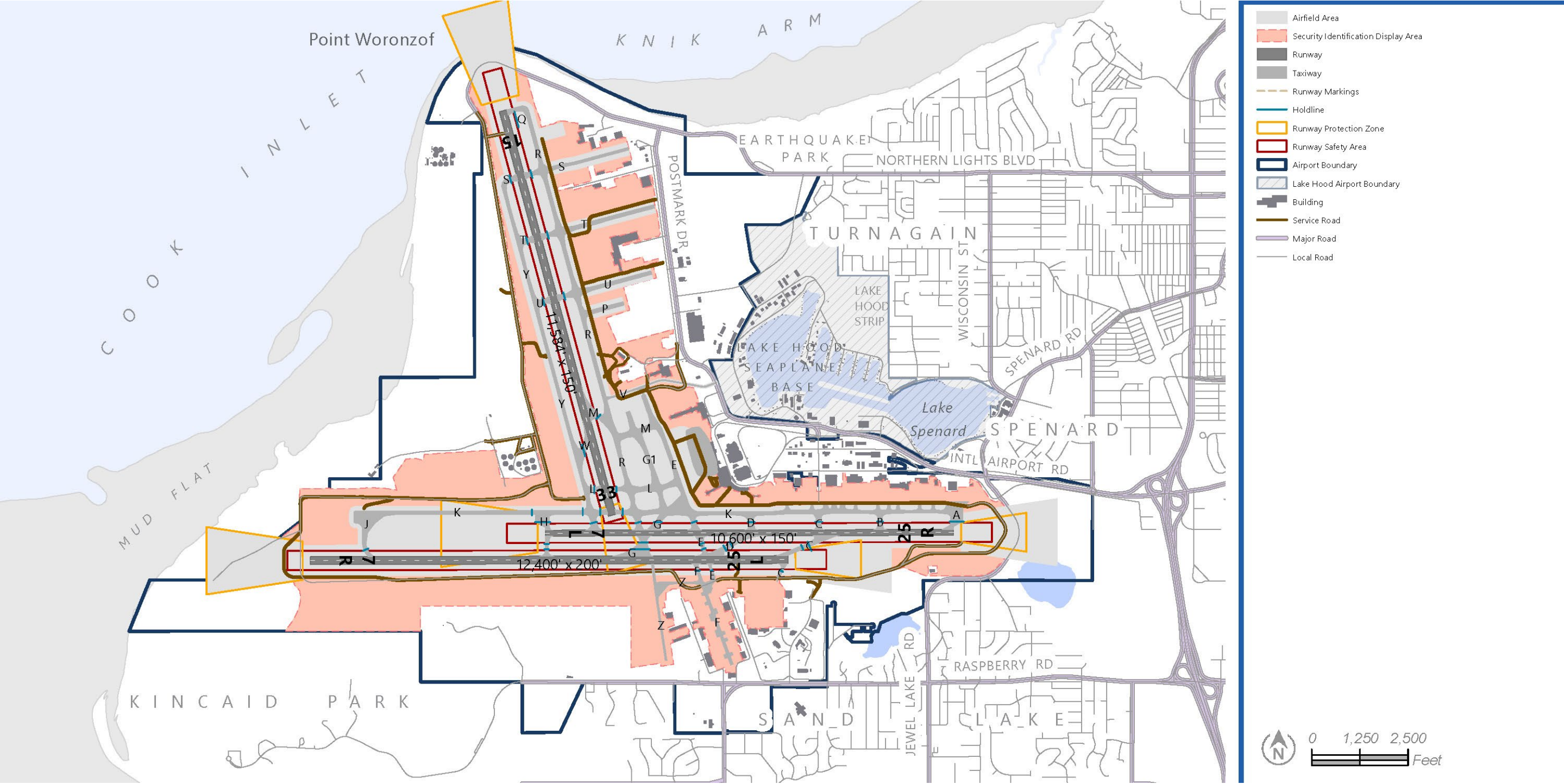
The Airport is comprised of three runways. Runway characteristics are summarized in **Table 2-2** and also described below.

Table 2-2
Existing Runway Conditions

	Runway 7L-25R	Runway 7R-25L	Runway 15-33
Length (feet)	10,600	12,400	10,865
Width (feet)	150	200	200
Threshold Displacement	None	None	33 - 465 Feet
Marking	Precision	Precision	Precision
Surface Material	Asphalt-Grooved	Asphalt-Grooved / Portland Cement Concrete	Asphalt-Grooved
Runway Design Code	D-V	D-VI	D-VI
Design Aircraft	Boeing 747-400	Boeing 747-8	Boeing 747-8
Effective Gradient	0.3%	0.3%	0.3%
Approach Visibility Minimum	7L – 1/4 mile 25R – Visual	7R – 1/4 mile 25L – Visual	15 – 3/4 mile 33 – 1 mile

Source: FAA Airport Master Record, 2024

Figure 2-24
Airfield Area



The runways consist of two parallel runways (Runway 7L-25R and Runway 7R-25L) oriented in an east-west direction and a single runway (Runway 15-33) roughly oriented in the north-south direction. Runway 7L-25R measures 10,600 feet by 150 feet. Runway 7R-25L measures 12,400 feet by 200 feet. The two east-west runways are separated, centerline to centerline, by a distance of 700 feet. This allows for simultaneous departures on both runways in Visual Meteorological Conditions.

Runway 15-33 measures 10,865 feet by 200 feet and is paved with asphalt. The Runway 33 end was decoupled from Runway 7L-25R in 2014 which resulted in a runway end located just south of Taxiway K. The Runway 33 threshold is located just south of Taxiway L, resulting in a 465-foot displaced threshold. The runway was rehabilitated and modified in 2019, which included widening to 200 feet to meet current FAA design standards.

Runway 15-33 and Runway 7L-25R are paved with asphalt. Runway 7R-25L is paved with a mix of asphalt and Portland Cement Concrete (PCC). The PCC portion of Runway 7R-25L is an 80-foot-wide section that is 5,000 feet long, as measured from the Runway 7R threshold, and is the most frequently used arrival runway at ANC.

Declared distances are established for the runways and are summarized in **Table 2-3**. The full length of the Runway 7L-25R is available for all operations in both directions.

The Takeoff Run Available (TORA), Takeoff Distance Available (TODA), and Accelerate-Stop Distance Available (ASDA) for Runway 7R is 10,900 feet to account for the departure end of runway at the intersection with Taxiway J. The Landing Distance Available (LDA) for Runway 7R is 12,400 feet.

The TORA and TODA for Runway 25L is 12,400 feet. The ASDA and LDA for Runway 25L is 12,000 feet to account for a compliant 1,000-foot Runway Safety Area (RSA) off the Runway 7R end. The current RSA only extends 600 feet beyond the Runway 7R end due to the steep elevation drop-off.

The TORA and TODA for Runway 15 represent full runway length. The ASDA and LDA for Runway 15 is 10,000 feet. The TODA for Runway 33 is 11,965 feet to account for a 1,100-foot clearway extending beyond the Runway 15 end. The TORA and ASDA for Runway 33 represent full runway length. The LDA for Runway 33 is 10,400 feet to account for the displaced threshold.

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Table 2-3
Declared Distances (in feet)

Runway	Runway Length	Operational Direction	TORA	TODA	ASDA	LDA
Runway 7L-25R	10,600	Runway 7L	10,600	10,600	10,600	10,600
		Runway 25R	10,600	10,600	10,600	10,600
Runway 7R-25L	12,400	Runway 7R	10,900	10,900	10,900	12,400
		Runway 25L	12,400	12,400	12,000	12,000
Runway 15-33	10,865	Runway 15	10,865	10,865	10,000	10,000
		Runway 33	10,865	11,965	10,865	10,400

Source: FAA Airport Master Record, 2024

Notes: TORA = Takeoff Run Available - The runway length declared available and suitable for the ground run of an aircraft taking off. TODA = Takeoff Distance Available - The TORA plus the length of any remaining runway or clearway beyond the far end of the TORA; the full length of TODA may need to be reduced because of obstacles in the departure area. ASDA = Accelerate-Stop Distance Available - The runway plus stopway length declared available and suitable for the acceleration and deceleration of an aircraft aborting a takeoff. LDA = Landing Distance Available - The runway length declared available and suitable for landing an aircraft.

Runways are designed based on an Runway Design Code (RDC), which is determined using a combination of aircraft approach speed (AAC) and airplane design group (ADG) based on the wingspan or tail height of the critical aircraft using the runway. The AAC and ADG definitions are described in **Table 2-4** and **Table 2-5**. The RDC for Runway 7R-25L and Runway 15-33 is D-VI and the RDC for Runway 7L-25R and Runway 15-33 is D-V.

Table 2-4
Aircraft Approach Category (AAC)

Aircraft Approach Category	Approach Speed
A	Approach speed less than 91 knots
B	Approach speed 91 knots or more but less than 121 knots
C	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Source: Federal Aviation Administration Advisory Circular (AC) 150/5300-13B, Airport Design

Table 2-5
Airplane Design Group (ADG)

Group Number	Tail Height (feet)	Wingspan (feet)
I	<20	<49
II	20 ≤ 30	49 ≤ 79
III	30 ≤ 45	79 ≤ 118
IV	45 ≤ 60	118 ≤ 171
V	60 ≤ 66	171 ≤ 214
VI	66 ≤ 80	214 ≤ 262

Source: Federal Aviation Administration Advisory Circular (AC) 150/5300-13B, Airport Design

The RSA is a defined surface surrounding the runway specifically prepared to reduce the risk of damage to aircraft in the event of an under-shoot, overshoot, or excursion from the runway. The typical RSA extends 1,000 feet beyond the runway end (or 600 feet prior to the threshold where the runway end is equipped with vertical guidance) and is 500 feet wide centered on the runway centerline. The RSA on the Runway 7R end extends 600 feet from the runway end. Declared Distances are used to compensate for the remaining RSA distance because the sharp elevation change west of the Runway 7R end does not allow for a fully graded RSA beyond the runway end.

The Runway Object Free Area (ROFA) is an area centered on the ground on a runway centerline provided to enhance the safety of aircraft operations by remaining clear of objects, except for objects that need to be located in the object free area for air navigation or aircraft ground maneuvering purposes. The ROFA typically extends 1,000 feet beyond the runway end and is 800 feet wide centered on the runway centerline.

The Runway Protection Zones (RPZ) are areas at ground level prior to the threshold and beyond the runway end to enhance the safety and protection of people and property on the ground. The RPZ dimensions for each runway are based on the visibility minimums, AAC, and ADG. The approach RPZ dimensions for the 7L and 7R ends are 1,000 feet (inner width) by 1,750 feet (outer width) by 2,500 feet (length). The approach RPZ dimensions for the 25L and 25R ends are 500 feet (inner width) by 1,010 feet (outer width) by 1,700 feet (length). The approach RPZ dimensions for the 33 and 15 ends are 1,000 feet (inner width) by 1,510 feet (outer width) by 1,700 feet (length). The departure RPZ dimensions for all runway ends are 500 feet (inner width) by 1,010 feet (outer width) by 1,700 feet (length).

Runway pavement bearing strengths define the weight limit at or below which an aircraft may operate on the runways. The weight bearing capacity for a runway is determined by the configuration of the aircraft landing gear system and is depicted in **Table 2-6**.

Table 2-6
Runway Pavement Bearing Strength

Gear Configuration	Runway 7R-25L Weight (in thousands of pounds)	Runway 7L-25R Weight (in thousands of pounds)	Runway 15-33 Weight (in thousands of pounds)
SW	75	75	75
DW	175	175	175
DT	400	400	400
DDT	1,300	900	900

Source: FAA Airport Master Record, 2024

2.7.1.2 Taxiways

The Airport taxiway system allows aircraft to move between the runways and terminals, aprons, and service facilities. The taxiway system is described below.

The main taxiway serving the east-west parallel runways (Runway 7R-25L and Runway 7L-25R) is Taxiway K. The main taxiways serving Runway 15-33 are Taxiway R and Taxiway Y.

Taxiway G1 was constructed to alleviate congestion in the area where the Runway 33 end and south parallel runways intersect. Most aircraft that arrive on Runway 7R are able to exit via Taxiway G. From the Taxiway G exit, aircraft can either turn onto Taxiway R to access the North Airpark, turn onto Taxiway G1 to access the cargo technical stop apron area, or continue along Taxiway G to the passenger terminal building. One problem that presently exists is that both inbound and outbound traffic frequently meet at the five-way Taxiway G, Taxiway G1, and Taxiway K intersection. This is described further in Section 2.7.1.3.

Northbound traffic on Taxiway R continues to conflict with southbound traffic on Taxiway R between Taxiways M and U. These conflicts are sometimes alleviated by directing aircraft traffic to Taxiway Y, as necessary.

Taxiway T, located between the FedEx and United Parcel Service (UPS) leaseholds, is heavily used. Generally, congestion due to runway crossing requirements is not a problem based on existing demand levels.

The Taxiway Z extension project is ongoing. The current plan is to extend Taxiway Z east to the Runway 25R end and west to the Runway 7R end via multiple phases through 2027.

2.7.1.3 Airfield Hot Spots

An airfield “hot spot” is defined by the FAA as “a runway safety related problem area on an airport that presents increased risk during surface operations.” Hot spots are identified by the FAA with the intention of increasing awareness for pilots, airport staff, and ground vehicle operators who navigate the aircraft operations area. Currently, the Airport has two FAA identified hot spots.

Hot Spot 1 is located at the Taxiway G intersections with Taxiway E and Taxiway K. This is a complex intersection where pilots sometimes make an incorrect turn. Aircraft taxiing to Runway 33 via Taxiway E, G, and K sometimes miss the turn from Taxiway G onto Taxiway K and continue on Taxiway G across Runway 7L-25R. The potential risk of collision or runway incursion at this location is higher during conditions of restricted visibility.

Hot Spot 2 is located along Taxiway E between Runway 7L-25R and Runway 7R-25L. It involves aircraft pilots confusing hold short instructions for Runway 7L-25R and Runway 7R-25L when taxiing to Taxiway K via Taxiway E and Taxiway F. Taxiway D signage may not be visible from Taxiway E and Taxiway F hold positions.

2.7.1.4 Aircraft Parking Positions

The Airport owns and manages a number of aircraft parking areas and positions. Aircraft parking positions R2-R4, R7-R11, and R12-R14 are located adjacent to Taxiway E and are used primarily for cargo technical stops. Parking positions R8-R14 are able to accommodate up to Boeing 747-8 aircraft. Parking positions R2-R4 and R7 are able to accommodate ADG-V aircraft. Parking for ground support equipment is located close to these spots. Aircraft parking positions R2-4, R7-R11, and R12-R14 have in-ground power capabilities and are currently served by 400-Hertz converter carts. Additional aircraft parking positions N2-N8 are located at the North Terminal. These parking positions serve cargo technical stops, charter traffic, aircraft diverted from other airports, and aircraft maintenance purposes.

Aircraft parking positions P1-P3 are located east of Taxiway R and south of Taxiway P. One additional ADG-VI spot is entitled and may be built adjacent to position P3.

In the North Airpark, UPS and FedEx each have their own apron areas. Two parking positions within the UPS leasehold (R15 and R16) are owned by the Airport and used by UPS under a preferred user agreement with Airport operations.

In the East and South airparks, with the exception of the Kulis Business Park, the Airport does not maintain or control any aircraft parking areas. All parking areas are located on leased property and managed by their leaseholders.

An aircraft run-up area is provided at Taxiway J near the Runway 7L and 7R end.

2.7.1.5 Pavement Management

FAA requires all airports receiving federal funding to have a pavement management and maintenance program in place. FAA's Advisory Circular 150/5380-7B Airport Pavement Management Program (dated October 2014) governs how airport pavement management programs are to be managed.

The Airport has a pavement management program in place that serves as an aid in effective airport pavement maintenance effort. The Airport also conducts a Pavement Condition Index (PCI) inspection program.

As part of the PCI update at the Airport, a condition survey of all airfield pavements at the Airport, including runways, taxiways, taxilanes, and aprons along with their shoulders, is conducted. The PCI metric was developed by the U.S. Army Corps of Engineers and is based on a visual survey of the pavement. During the condition survey, a representative sample of all pavements are inspected, and distresses are recorded and processed using a program called MicroPAVER, which generates an individual PCI for each pavement area. Approximately one-third of all airfield pavements are inspected each year.

The PCI is a numerical index that ranges between zero and 100 and indicates the general condition of a pavement. The PCI value of 100 means the pavement is in excellent condition and a value of zero means the pavement is in very poor condition or has failed and is no longer usable. The PCI values are grouped as excellent (85-100), very good (70-84), good (55-69), fair (40-54), poor (26-40) and very poor or failed (0-25).

A color-coded PCI map is generated showing the PCI values of different pavement areas following the inspection. The color code ranges from green (for pavements with higher PCI values) to red (pavements with lower PCI ratings).

Guidelines set by the Alaska State Legislature (Chapter 90 Session Laws of Alaska 01 Sec 150 Line 26) require the Airport to maintain a minimum PCI condition of 70 for all runways and 60 for taxiways and aprons.

Current Pavement Conditions

Per the 2021 pavement condition map, Runway 15-33 had high PCI values greater than 85.

Portions of Runway 7R-25L had PCI values between 55 and 69. However, pavement repairs were conducted in summer of 2024 which should result in higher PCI values when complete. Portions of Runway 7L-25R had PCI values above 85 while other sections were between 70 and 84. Runway 15-33 had PCI values above 85. That runway pavement is in excellent condition given that a pavement rehabilitation project was completed in 2019.

The majority of taxiway and apron pavements are in good condition, while a few areas exhibit poor PCI values. Taxiway R, between Taxiway S and Taxiway P has PCI values between 40 and 54. The Taxiway R segment between Twy M and Taxiway K has PCI values between 55 and 69. Taxiway K, east of Taxiway G1, has PCI values less than 54.

2.7.1.6 Navigational Aids

The following navigational aids, or ground-based navigational facilities, located both on- and off-Airport, are used within the published approaches for the Airport:

- Airport surveillance radar (ASR)
- Automated Surface Observing Systems (ASOS)
- Distance measuring equipment (DME)
- Instrument Landing System (Runway 7L, Runway 7R, Runway 15)
- Remote transmitter receiver (RTR)
- Rotating beacon
- Runway Visual Range Equipment (RVR) (all runways)
- Very high frequency omnidirectional range (VOR)

The ASR is the radar system at an airport used to display the position of aircraft in the terminal area. The ASR for the Airport is located just north of the fuel farm in the West Airpark area.

ASOS equipment collects meteorological observations on a continual basis, 24 hours a day. The meteorological reports are made available to airport users (e.g., pilots, air traffic controllers) in real-time and the data is archived in the Global Surface Hourly database.

DME equipment allows pilots to determine their distance from a land-based transponder. TACAN also provides omnidirectional azimuth bearing information for military aircraft and distance information for all aircraft. TACANs are generally more accurate than a combined VOR / DME but can also be used with VOR and DME facilities.

In an Instrument Landing System (ILS), an approach path is provided for exact alignment and descent of an aircraft on final approach. Guidance information is provided via a combination of localizer and glide slope. Localizers provide horizontal runway centerline guidance whereas glide slopes provide vertical guidance.

The RTR provides radio communications between air traffic controllers and pilots in the terminal airspace.

A rotating beacon is used to help pilots locate the airport airfield at night or in low visibility conditions.

The RVR equipment measures the atmospheric transmissivity along runways and translates this visibility value to the air traffic user. RVRs support increased precision takeoff and landing capacity per the authorized ILS minimums.

The VOR station is a ground-based facility that transmits high frequency radio signals 360 degrees in azimuth from the station. These signals help the pilot turn at a given point above the ground or fly along a radial to or from the station. There are two VOR stations in the ANC terminal airspace – one at ANC and one at Big Lake Airport. The VOR at ANC was relocated from Fire Island to the Airport in 2012. A third VOR is located outside the ANC terminal airspace at Kenai.

2.7.1.7 Runway Lighting

The three runways are equipped with a variety of lighting to guide aircraft operations. High intensity runway lights and centerline lighting are installed on all runways. Touchdown zone lighting is installed on the Runways 7R and 7L. Runway end identifier lights are installed only on the Runway 33 end.

Approach lighting used at the Airport is summarized in **Table 2-7**. It should be noted that for Runway 7R, the approach lighting system with sequenced flashing lights (ALSF-II) has frequently experienced failures due to wiring issues.

The published approach procedures for precision and non-precision instrument approaches are summarized in the section on airspace.

Table 2-7
Runway Lighting

	Edge Lights	Centerline Lights	Visual Slope Indicator	Approach Lighting	Other Lighting
Runway 7L	High	Yes	PAPI	MALSR	Touchdown
Runway 25R	High	Yes	PAPI	-	
Runway 7R	High	Yes	PAPI	ALSF-II	Touchdown
Runway 25L	High	Yes	PAPI	-	
Runway 15	High	Yes	PAPI	MALSF	
Runway 33	High	Yes	PAPI	-	REILs

Source: FAA Airport Master Record, 2024

2.7.1.8 Airport Service Roads

The Airport has a number of service roads (sometimes also referred to as tug roads) located within the aircraft operations area. Airport service roads provide access for ground service vehicles to areas of the aircraft operations area. For large commercial airports like ANC, service roads often cross, but are not collocated on, aircraft taxiways. This segregation of airport ground vehicles from aircraft taxiways increases safety since pilots are more familiar with seeing vehicle activity in specific locations on the airfield.

In addition to the service roads, a bypass Tug Road runs parallel to Postmark Drive and connects the North Airpark to the U.S. Post Office and terminal area. However, the Airport lacks a contiguous perimeter road. The west side of the Airport north of Runway 7L is not accessible by service road. A service road runs from the fuel farm west around the end of Runways 7L and 7R to connect with the south Tug Road. Ideally, a service road would run from the fuel farm north toward Point Woronzof and connect with the North Airpark. To overcome this deficiency, ground vehicles are forced to comeingle with aircraft on various taxiways and runways or use public roads to access certain areas of the Airport. It is important to note that most ground service vehicles are not licensed and are not legally allowed on public roadways because of liability issues.

2.7.1.9 Airport Access and Security

An Air Operations Area (AOA) comprises the majority of the airfield area and is where aircraft operate. Only permitted Airport, FAA, and Transportation Security Administration (TSA) personnel are allowed within the AOA. To prevent unwanted persons, animals, and vehicles from entering the AOA, and to protect the safety of air operations, the AOA is surrounded by an 8-foot-tall security fence.

2.7.2 Airspace

This section contains a brief summary of the airspace surrounding the Airport, the responsibilities of various air traffic control facilities, and limitations imposed on the flight paths of individual aircraft by the geography and airspace in the surrounding area. In addition, it describes the preferred runway uses, aircraft approaches and departures, special air traffic rules, and noise mitigation strategies.

2.7.2.1 Air Traffic Control Procedures

The FAA controls airspace through several layers of air traffic control facilities. Generally speaking, the Air Route Traffic Control Center handles aircraft during the en-route phase of flight. The Terminal Radar Approach Control (TRACON) facility handles both arriving aircraft during their initial descent toward the airport, and departing traffic after they clear the airport traffic pattern. The Airport Traffic Control Tower (ATCT) is responsible for aircraft making their final approach before landing, ground operations, takeoff, and initial climb. Each type of air traffic control facility has its own staffing, equipment, and facilities, and they are generally not collocated.

Aircraft are also under the control of provisions contained in Subpart D of Special Federal Aviation Regulation Part 93, which outlines unique operational requirements for aircraft operating in the Anchorage area. The regulation essentially creates separate flight paths and altitudes for both large turbine-powered aircraft and smaller piston-powered aircraft as they approach and depart from the Airport, Lake Hood Airport, Joint Base Elmendorf-Richardson (JBER), and Merrill Field Airport. Part 93 stipulations create the rules for the general flow of traffic in and out of the Anchorage area, but Air Traffic Controllers take an active role in directing traffic. Thus, while Part 93 provides some information to pilots as to direction and altitude they might expect specific instructions from Air Traffic Controllers take precedence over the Part 93 provisions.

The airspace around the Airport is somewhat complex. The Airport itself lies within Class C airspace. Class C airspace is defined by the FAA as airspace in which pilots must be in two-way communications with Air Traffic Controllers. Class C airspace is the second-busiest tier of airspace control contained within the FAA's hierarchy of airspace areas.

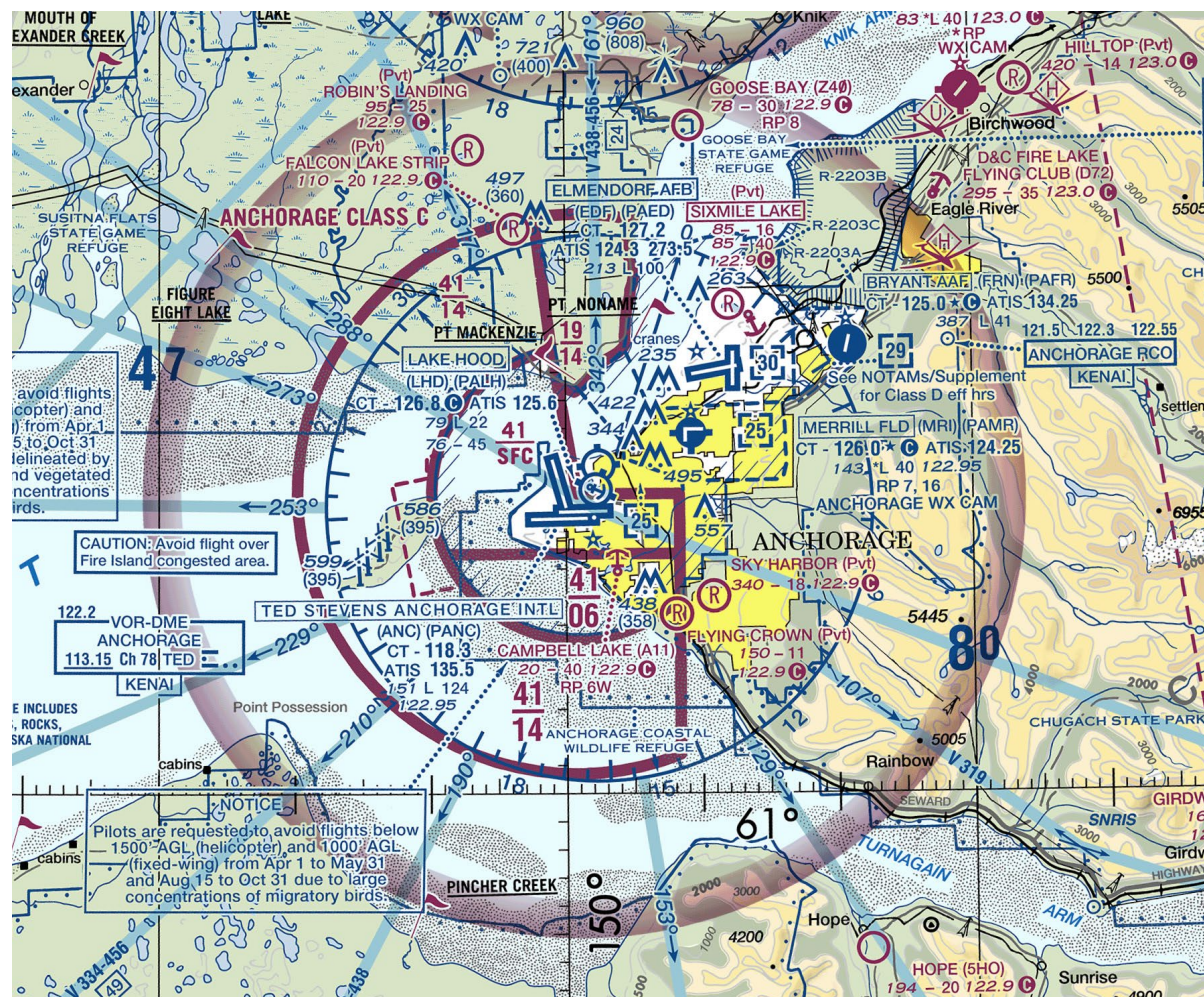
As depicted in **Figure 2-25**, the Anchorage Class C airspace consists of several blocks of airspace. The core is a semicircular tract centered on the Airport and extending east, west and northwest of the Airport in the direction of the extended runway centerlines and exists from the surface to 4,100 feet mean sea level (MSL). A second semicircle extends south of the Airport and includes the area from 600 feet MSL to 4,100 feet MSL. Outside of these areas is a band that runs from southeast of the Airport to north-northwest and extends from an altitude of 1,400

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feet MSL to 4,100 feet MSL. In addition, a trapezoidal area directly north of the Airport and on the opposite side of the Knik Arm Inlet, contains Class C airspace from 1,400 feet MSL to 1,900 MSL.

Aircraft arriving or departing the Airport must contend with potential traffic and conflicts with aircraft from JBER and Merrill Field Airport. To help manage traffic, the FAA has developed eight Standard Terminal Arrivals and five Departure Procedures that outline specific routes arriving and departing traffic should follow. As an aircraft makes contact with Air Traffic Controllers, the pilots are given instructions regarding which route to fly depending on weather conditions, local traffic, and traffic at nearby airports.

Figure 2-25
FAA Anchorage Sectional Chart



Source: Federal Aviation Administration, 2024.

2.7.2.2 VFR and IFR Procedures

Air traffic operations fall within two categories—those flying under Visual Flight Rules (VFR) and those under Instrument Flight Rules (IFR). Under VFR, aircraft operating in good visibility weather do so under “see and avoid” practices with other aircraft. The pilots are given route instructions while inside the Class C airspace, but otherwise are relatively free to choose their own routes and altitudes. Many general aviation aircraft operate under VFR most of the time.

Transport category aircraft, as well as many charter aircraft and general aviation aircraft that are properly equipped and staffed, typically operate under IFR. Aircraft flying under IFR are required to comply with routes and altitudes given by Air Traffic Controllers during all phases of flight. The controllers are then responsible for ensuring adequate separation between aircraft, as they may be flying in clouds, snow or other conditions of poor visibility during which the view outside the aircraft is limited.

Aircraft approaching the Airport during periods of poor visibility fly through the Airport environment and to the runway using predetermined routes called Standardized Instrument Approach Procedures. The pilot’s ability to land without actually seeing the runway landing zone is determined by a number of factors, including approach lighting, NAVAIDs, aircraft equipment, and pilot qualifications. **Table 2-8** summarizes the instrument approaches available at the Airport and the minimum visibility and heights associated with each approach. Note that not all aircraft can meet the minimums listed.

The complex interactions of international and VFR traffic heading to and from the Airport and military traffic heading to and from JBER are depicted in **Figure 2-26**, which is an excerpt from the FAA Terminal Area Chart.

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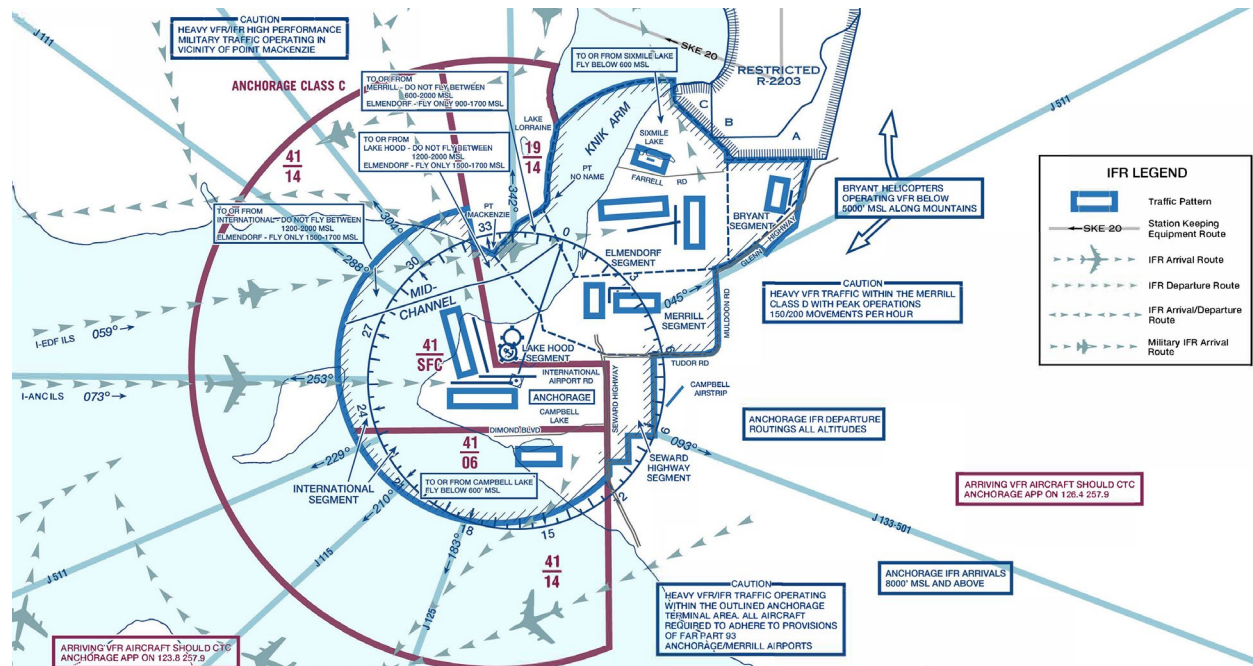
Table 2-8
Approach Procedures

Approach Name	Minimum Visibility	Minimum Descent Altitude (AGL) (feet)
Runway 7R		
ILS or LOC / DME	1/2 mile	200
ILS (Special Authorization) Cat I	1,400 feet	245
ILS Cat II	1,200 feet	115
ILS Cat III	N/A	N/A
RNAV (GPS)	1/2 mile	200
RNAV (RNP)	1 mile	430
Runway 7L		
ILS or LOC / DME	1/2 mile	200
ILS (Special Authorization) Cat I	1,400 feet	158
ILS (Special Authorization) Cat II	1,200 feet	108
RNAV (GPS)	1/2 mile	200
Runway 33		
RNAV (RNP)	1 mile	400
Runway 15		
ILS	3/4 mile	200
RNAV (GPS)	3/4 mile	200
Runway 25L		
Seward Visual	3 miles	VFR Conditions
Runway 25R		
Highway Visual	3 miles	VFR Conditions

Source: FAA Airport Master Record, 2024

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Figure 2-26
FAA Terminal Area Chart



Source: Federal Aviation Administration, 2024.

2.7.2.3 Preferential Runway Use Program

There are noise sensitive land uses located to the east and south of the Airport. The Airport currently has a preferential runway use program in place as a noise management solution that results in most approaches and departures occurring over water. This reduces the amount of noise-sensitive land uses under the flight paths and being affected by aircraft noise.

The Preferential Runway Use Program identifies the preferred runways for arrivals and departures and ranks them in order of preference, as described in **Table 2-9**. Runways 7R and 7L are listed higher in the departure priority during daytime hours in recognition of air traffic considerations. When air traffic conditions allow, Runways 25L and 25R are preferred.

Under the terms of the Preferential Runway Use Program, selecting the next preferential runway is allowed under any of the following conditions:

- If the runway is not clear and dry (i.e., it is adversely affected by snow, slush, ice or water, or by mud, rubber, oil or other substances)
- When winds, including gusts, as recorded by Airport wind sensors exceed:
 - Crosswind components of 28 kilometers / hour (15 knots)
 - Tailwind components of 9 kilometers / hour (5 knots)
- When wind shear has been reported or forecasted, or thunderstorms are expected to affect the departure or approach

- When the combined traffic levels at JBER and the Airport result in excessive airfield traffic congestion and cause unacceptable departure delays (delay alone does not constitute a reason for pilots to request a noise sensitive runway for departure)
- When a preferred runway is closed for snow removal, construction, maintenance, or other reasons

Table 2-9
Preferential Runway Use Program

Operation	Priority	Daytime (7 AM - 10 PM)	Nighttime (10 PM - 7 AM)
Departures			
	1	Runway 33	Runway 33
	2	Runway 7R	Runway 25L
	3	Runway 7L	Runway 25R
	4	Runway 25L	Runway 7R
	5	Runway 25R	Runway 7L
	6	Runway 15	Runway 15
Arrivals			
	1	Runway 7R	Runway 7R
	2	Runways 7L / 15	Runways 7L / 15
	3	Runway 33	Runway 33
	4	Runways 25L / 25R	Runways 25L / 25R

Source: ANC FAR Part 150 Noise Compatibility Study Update, 2015

2.7.2.4 Threshold Siting Surfaces / Terminal Instrument Procedures (TERPS) Departure Surface

To protect the use of the runway in both visual and instrument meteorological conditions, an approach surface or threshold siting surface is required per FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS) and as described in FAA AC 150/5300-13B, Airport Design. The threshold siting surface has a trapezoidal shape extending away from the runway along the centerline at a specific slope expressed in horizontal feet by vertical feet. The surface slope at each runway end depends on the visibility minimums and type of procedure associated with the runway end. The purpose of the approach surfaces is to ensure there are no penetrations beyond the designated approach surface for a runway end. Should penetrations exist, the threshold for the runway should be displaced. The threshold siting surface for Runways 7L, 7R, and 15 has a slope of 34:1. The threshold siting surface for Runway 25L, 25R, and 33 has a slope of 20:1. The Airport has no threshold siting penetrations. For departures, the TERPS departure surface for all instrument runways is 40:1.

2.7.2.5 Part 77 Imaginary Surfaces

To protect the airspace in the vicinity of the Airport, CFR Part 77 defines five imaginary surfaces for airports.

- **Primary Surface** – A surface longitudinally centered on the runway and extending 200 feet from each runway end
- **Approach Surface** – A surface longitudinally centered on the extended runway centerline and extending outward beyond the primary surface
- **Horizontal Surface** – A horizontal plane 150 feet above the established airport elevation
- **Conical Surface** – A 20:1 slope surface extending beyond the horizontal surface
- **Transitional Surface** – A surface joining approach and horizontal or approach and transitional surfaces

The Part 77 approach surface is based on the type of aircraft using and instrumentation available for each runway. The slopes of the approach surfaces are 20:1 for Runways 25L, 25R, and 33; and 50:1 for Runways 7L, 7R, and 15.

2.7.3 Passenger Terminal and Landside Facilities

The passenger terminal and landside facilities include the North and South terminals, Airport roadways, terminal curbsides, the various short- and long-term public parking facilities, employee parking facilities, commercial vehicle staging areas, and rental car facilities. An overview of the passenger terminal and landside facilities is depicted in **Figure 2-27**.

2.7.3.1 South Terminal

The South Terminal originally opened in 1953. Between 1965 and 1969 the original structure was expanded to include the hexagon, the B Concourse, the ticket lobby, and the baggage claim areas. The oldest remaining portion of the original building is the hexagon. The architecture firm of Manley & Mayer designed these portions of the building.

In 1984-1985, A Concourse was added to serve regional commuter traffic, and B Concourse was renovated. Between 1988 and 1990, the main terminal was remodeled. Between 1999 and 2004, the main terminal and concourse (constructed in 1952) was demolished, and a new main terminal and C Concourse was constructed. In 2010, a complete renovation and seismic upgrade of A Concourse and B Concourse was completed. After these latest renovations, the South Terminal was considered completely modernized and remains in good condition.

The approximately 787,600 square foot building is a composite floor plan. The landside portion of the A and B ticketing area is laid out in a curved configuration and straightens out at the newer "Great Hall" and the C Concourse. The concourses stemming off the main terminal

building do so in various geometries. The A Concourse and B Concourse are two-story structures, and the C Concourse is a three-story structure with a partial basement. The space allocation throughout the South Terminal is delineated in **Table 2-10**. The key plans for each level of the South Terminal building is depicted in **Figure 2-28**, **Figure 2-29**, **Figure 2-30**, **Figure 2-31**, and **Figure 2-32**.

Figure 2-27
Passenger Terminal and Landside Area

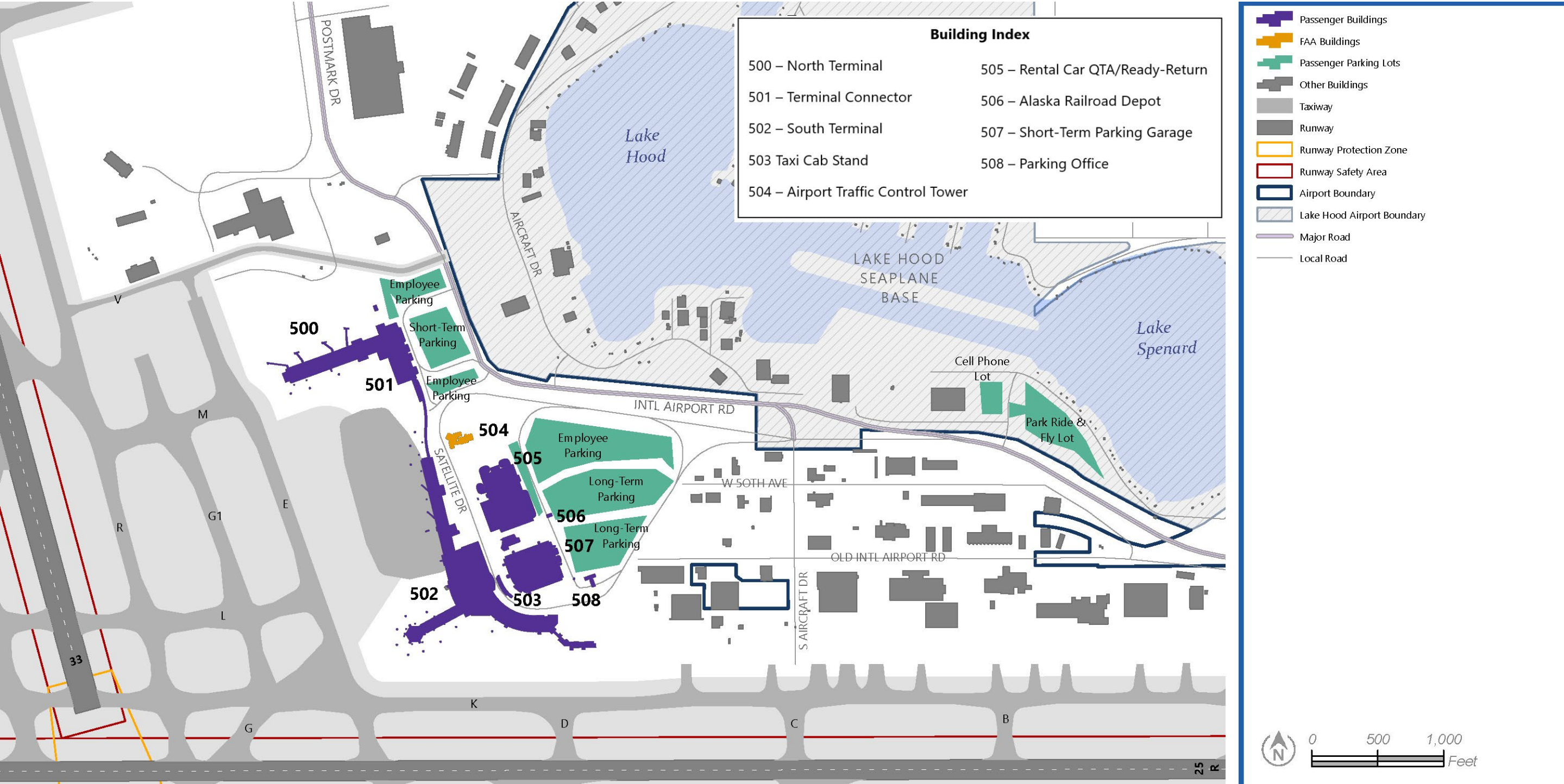
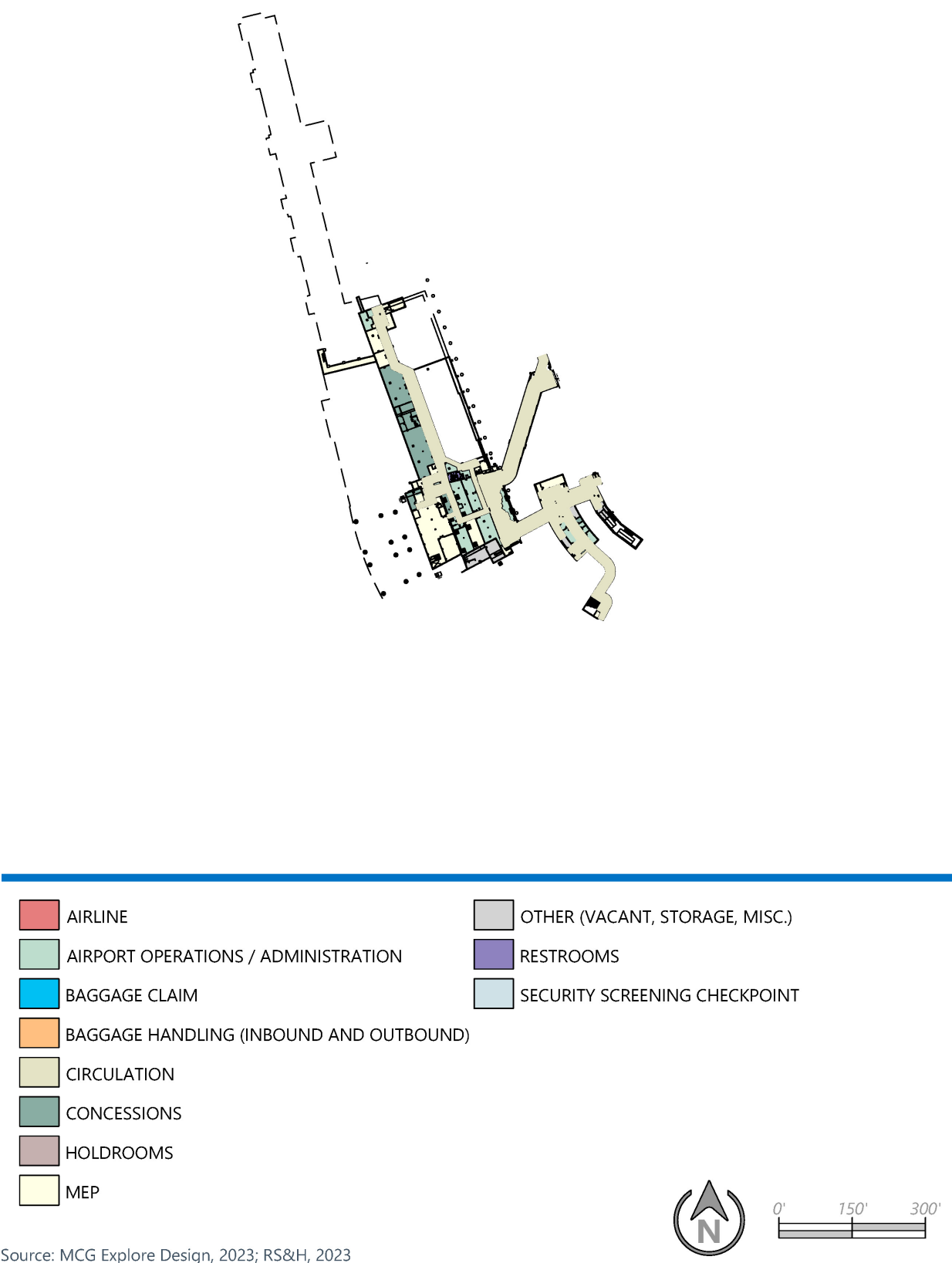


Figure 2-28
South Terminal – Basement



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Figure 2-29
South Terminal – First Floor



 AIRLINE	 OTHER (VACANT, STORAGE, MISC.)
 AIRPORT OPERATIONS / ADMINISTRATION	 RESTROOMS
 BAGGAGE CLAIM	 SECURITY SCREENING CHECKPOINT
 BAGGAGE HANDLING (INBOUND AND OUTBOUND)	
 CIRCULATION	
 CONCESSIONS	
 HOLDROOMS	
 MEP	

Source: MCG Explore Design, 2023; RS&H, 2023

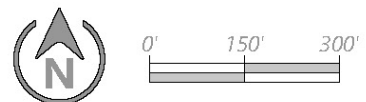
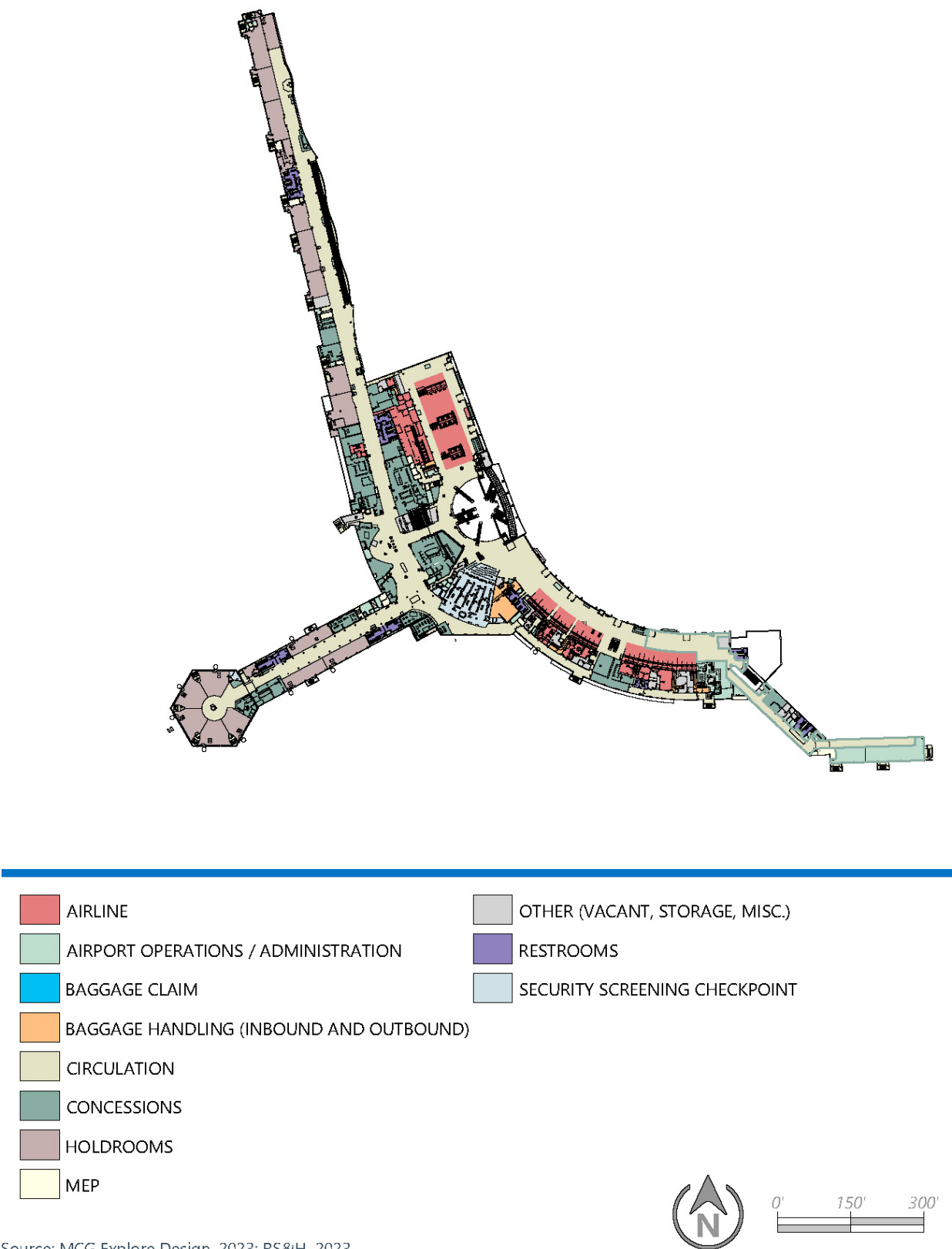
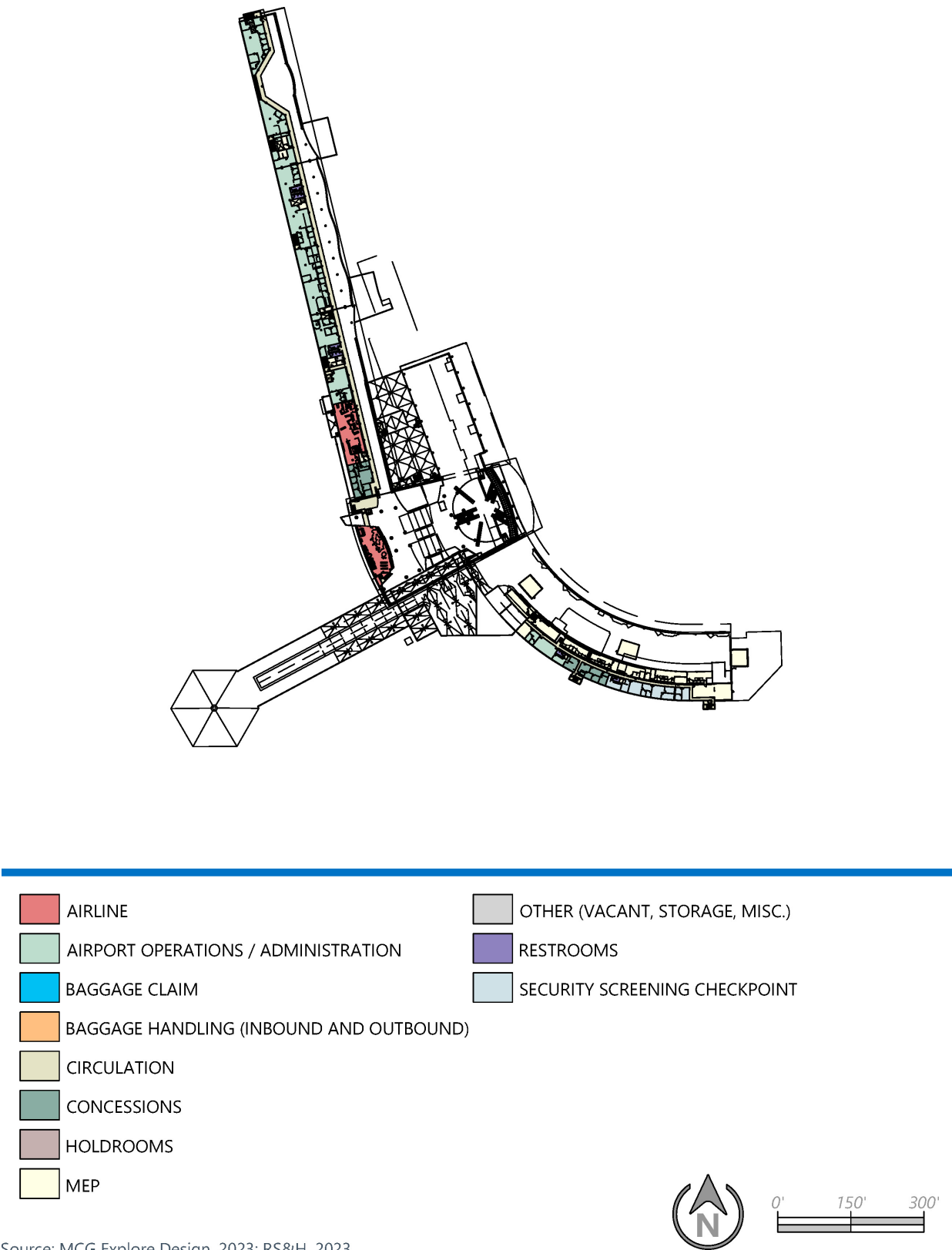


Figure 2-30
South Terminal – Second Floor



Source: MCG Explore Design, 2023; RS&H, 2023

Figure 2-31
South Terminal – Third Floor



Source: MCG Explore Design, 2023; RS&H, 2023

Figure 2-32
South Terminal – Fourth Floor

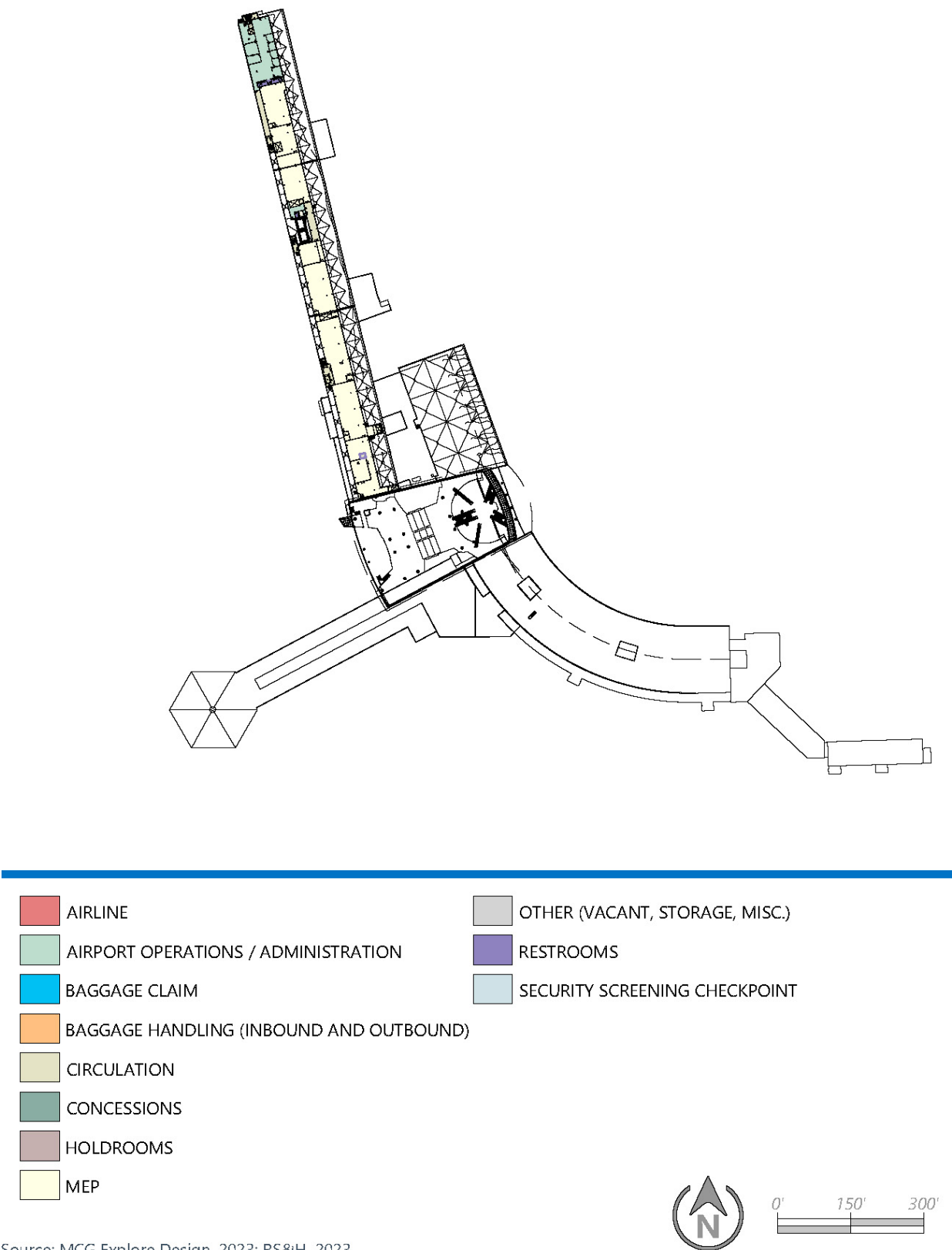


Table 2-10
South Terminal Floor Space Allocation

Functional Area	Area (square feet)
Airline	68,300
Airport Operations / Administration	67,600
Baggage Claim	35,300
Baggage Handling (Inbound and Outbound)	75,400
Circulation	248,400
Concessions	59,000
Holdrooms	51,300
MEP	99,900
Other (Vacant, Storage, Misc.)	24,000
Restrooms	14,200
Security Screening Checkpoint	44,200
Total	787,600

Source: MCG Explore Design, 2023; RS&H, 2023

Regional Operations

Alaska is a unique state when it comes to air travel. Regional air travel comprises a large amount of air traffic at the Airport due to the remoteness of a significant portion of the population. The A Concourse (which includes the L Gates for the purposes of this discussion) on the first floor of the South Terminal accommodates the regional airlines at the Airport. Regional passengers do not need to pass through TSA passenger screening and their baggage does not need to be inspected, as permitted in FAA and TSA regulations. Therefore, the path of travel for regional passengers differs from others at the South Terminal. Regional passengers arrive in the main terminal via several locations: departure and arrival level drop-offs, the tunnels from the train, the rental car facility, or the parking garages. The regional carrier ticket counters are located on the south side of the "Great Hall." After passengers check their bags, airline staff place the bags on take-away belts behind the counters. The bags are conveyed down to the first level into separate bag make-up areas. The regional carriers also maintain airline offices in the area behind the ticket counters.

After checking in at the ticket counter, regional passengers travel downstairs via stair, elevator, or escalator and depart via the A Concourse or L Gate departure lounges. The A Concourse and L Gate departure areas are located on the first floor, below the ticket counters and airline offices and continue east onto the pier.

There are currently eight food and beverage and eight retail concessions available on the A-Concourse and prior to the TSA security screening checkpoint; however, most concessions are located post-TSA security screening checkpoint. Thus, they are less convenient for regional passengers who may use their boarding pass to obtain access to the airside concessions.

The concessions offered on the landside of the South Terminal are adequate and varied enough to provide a good level of service to regional passengers.

The regional carrier operations were relocated to the first floor of the A Concourse pier through the South Terminal Seismic and Security Retrofit Project. As a result, the passenger boarding bridges, and aircraft hardstands were removed making this area essentially inaccessible to jet aircraft and leaving the second floor boarding area unoccupied. The regional carriers board passengers via ground loading and, therefore, do not use the second-floor departure lounges.

Regional passengers arriving at the Airport enter A Concourse to retrieve their baggage at one of the two common baggage claim devices on the ground level. The claim devices are both flat-plate belts, one being a T-shaped belt and the second being a double-T composite shape. After retrieving their bags, passengers depart the Airport via public transportation from the commercial curb; the passenger pick-up area at the arrivals curbside; the tunnels to the parking garage, train, and rental car facility; domestic flights; or international flights.

The general functionality and operations of the regional service at the Airport are good. There are adequate restrooms and amenities that offer a high level of service to passengers. However, discussions with Airport operations and maintenance (O&M) staff revealed three main issues with the A Concourse.

First, the baggage system does not have electronic sensors to monitor system status and notify the O&M staff of the location of a bag jam or belt issue, as does the latest baggage systems serving the B Concourse. According to O&M, the belts serving A Concourse were reconfigured from existing belts and are not equipped with the latest baggage system technology. Therefore, longer wait times result as maintenance has to visually identify where issues are occurring on the lines. Besides these issues, the baggage system at A Concourse generally functions well and is adequate for the level of demand at the Airport.

The second issue with the regional service facilities is its close proximity to the adjacent taxiway. Because there is such a high volume of large aircraft moving around the airfield, the mixing of small and large aircraft is a concern. Generally speaking, aircraft traffic at the Airport is maintained at a good Level of Service.

The third issue is the incursion of Jet A exhaust and fumes into the building's ventilation system. Generally speaking, however, passengers experience a good Level of Service.

Domestic Operations

Domestic passengers traveling through the Airport arrive in a similar manner to the regional passengers. The ticket counters for mainline domestic air carriers are located to the north and south of the "Great Hall." Alaska Airlines and American Airlines occupies preferentially leased ticket counters to the north of the "Great Hall," while Delta Air Lines and United occupy preferentially leased counters to the south and east. Seasonal carriers Air Canada and Icelandair share ticket counters to the north while Condor, Eurowings, and Sun Country share ticket counters to the south.

Alaska Airlines operates "island" style ticket counters in addition to the traditional, front-facing counters common to most airports. Each ticket "island" is configured with a single, shared baggage take-away belt flanked by counters on either side. Self-service ticket kiosks are located at the end of each "island" closest to the roadway, in clusters next to the "Great Hall," and in the ground transportation lobby. Alaska Airlines also has traditional ticket counters along the west wall of the ticket area, with a baggage take-away belt behind. Airline ticket offices are located behind the belt. In both cases, checked baggage travels down to the ground level and proceeds through the TSA Checked Baggage Inspection System (CBIS) and out to the bag make-up area.

All other air carriers, located on the north and south sides of the "Great Hall," have traditional ticket counters with baggage take-away belts behind. Airline ticket offices are located behind the counters. Checked baggage travels down to the ground level and proceeds out to the bag make-up areas. As noted previously, there are a few international air carriers that operate ticket counters in the South Terminal. Many of the international departures at the Airport leave from the South Terminal; however, international arrivals occur at the North Terminal (see Section 2.7.3.3).

The CBIS at the South Terminal is split into two systems: one serving the B Concourse, and one serving the C Concourse. The B Concourse CBIS is a fully automated inline baggage system that consists of four Explosive Detection System (EDS) machines.

The CBIS automatically sorts baggage and diverts any alarmed bags to the TSA hand-screening area. Once the baggage is cleared, it travels to the B Concourse make-up belt. Oversized bags are screened by TSA personnel in an area adjacent to the ticket counters. Passengers present their oversized baggage to the agent and once cleared, it travels directly to the make-up belt.

The B Concourse make-up unit consists of a single, common use, flatplate belt that is used by all airlines. The Airport has two concerns with this make-up area. First, there is limited tug circulation space around the belt, which results in damage to the walls, bollards and equipment on the ceiling. Second, the belt does not have enough storage capacity. Therefore, during peak departure times, the belt becomes overloaded with baggage. The overloaded belt can cause all of the baggage lines to shut down, sometimes all the way up to the ticket counters. During peak demand times, a shutdown of the baggage system can result in many bags not being screened in sufficient time to make their flights. Consequently, passengers may arrive at their destinations without their luggage.

Also, when the baggage system is overloaded, bags on the belt can be pushed onto the floor. Airlines that fail to pick up bags in a timely manner can contribute to bags missing their intended flight. Correcting the capacity problems of the B Concourse baggage belt system would improve the service at the Airport. **Figure 2-33** illustrates the baggage system from the ticket counter to the make-up area in B Concourse.

The C Concourse CBIS was upgraded in 2017 to replace four CTX 9400s with four new machines that are configured into two 1+1 systems operating in a metered flow of 400 bags per hour which increased throughput and improved the baggage handling systems. The TSA CBIS area is located at the west end of the "Great Hall" on the ground level. It consists of four EDS machines. Alarmed bags are diverted to the TSA secondary screening area and, after being cleared, travel to the make-up area. The C Concourse make-up area consists of two sloped-plate belts, and one flat-plate belt that is used for oversized bags. **Figure 2-34** illustrates the baggage system from the ticket counter to the make-up area in C Concourse. **Table 2-11** shows the frontage (outside perimeter) length of the belt system in the South Terminal. After passengers check in at the ticket counters, they must pass through the TSA Passenger Security Screening Checkpoint (SSCP). The SSCP is located on the south side of the "Great Hall" and consists of six screening lanes. The SSCP is equipped with the latest TSA screening equipment, including Advanced Imaging Technology Whole Body Imaging machines. After passing through the checkpoint, passengers continue into the secure concourse area.

The secure portion of the B and C concourses has a variety of food and retail concessions. There are a variety of dining options ranging from fast food to sit-down restaurants, and numerous retailers offering various goods ranging from news and sundries to specialty merchandise.

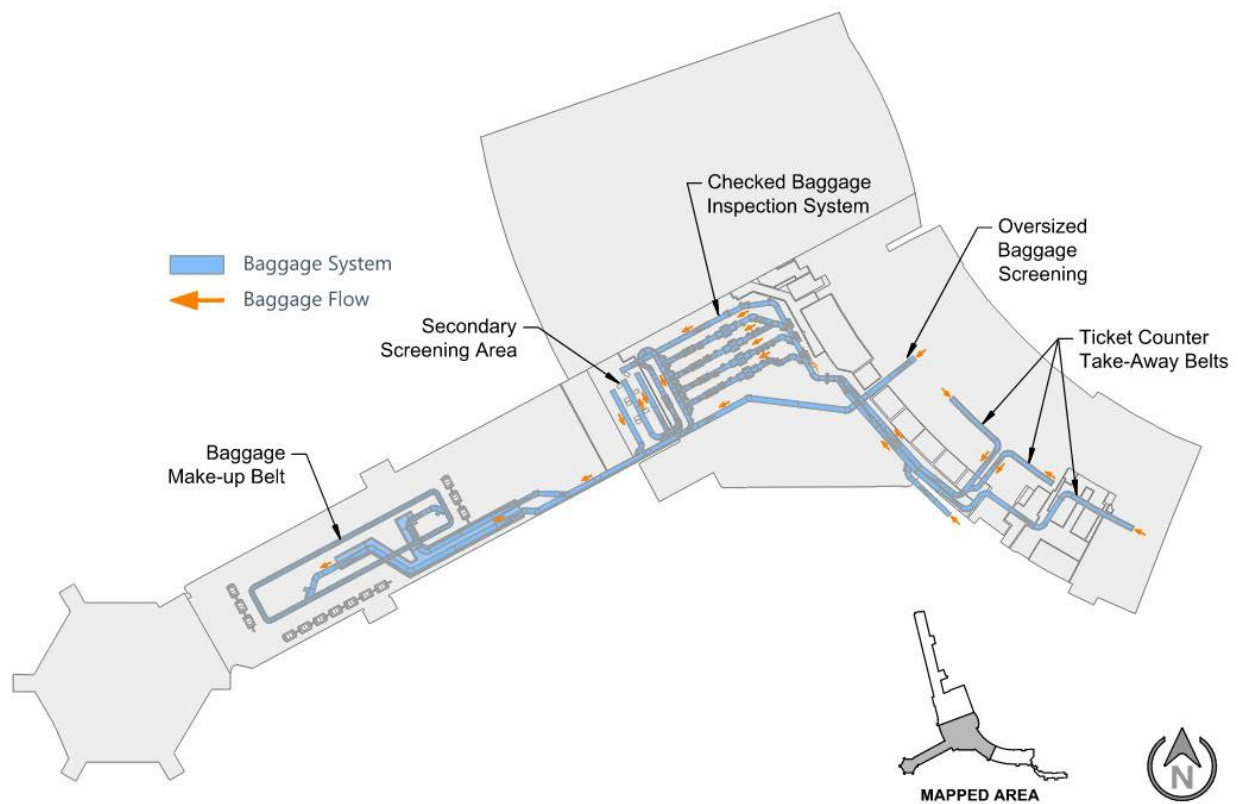
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Table 2-11
South Terminal Baggage Belts

	Baggage Belt	Length (linear feet)
A Concourse	Bag Make/up	105
	Bag Claim	230
B Concourse	Bag Make/up	355
	Bag Claim	340
C Concourse	Bag Make/up	510
	Bag Claim	380

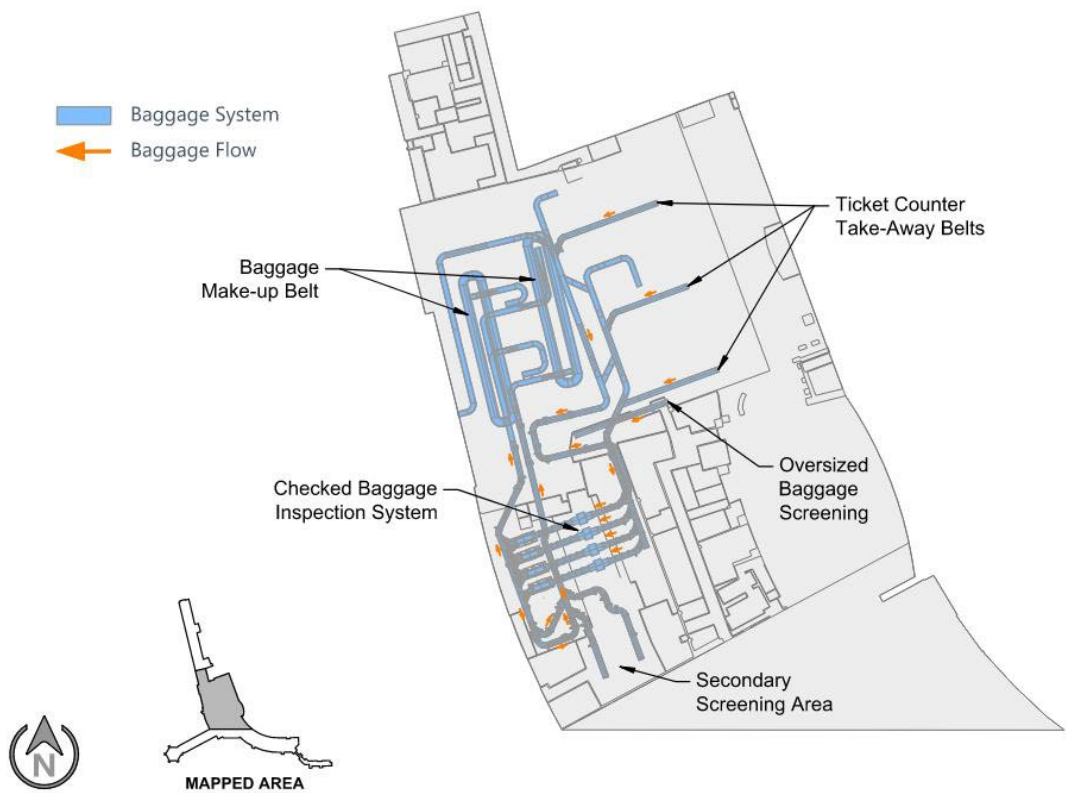
Source: RS&H, 2024

Figure 2-33
South Terminal – B Concourse Outbound Baggage Makeup



Source: RS&H, 2024

Figure 2-34
South Terminal – C Concourse Outbound Baggage Makeup



Source: RS&H, 2024

The B Concourse consists of nine departure gates: three along the pier, five at the end in the hexagonal space, and one on the second level above Gate L1. All 9 gates are equipped with passenger boarding bridges; however, Gate 10 does not have a dedicated passenger holdroom. The C Concourse consists of nine departure gates, and all have passenger boarding bridges. **Table 2-12** summarizes the gate and bridge information for the South Terminal.

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Table 2-12
South Terminal Gates

Concourse	Gate	Square Footage	Airline	Bridge Model
A Concourse	L1	3,506	ConocoPhillips	No Bridge
	L2	3,624	Grant Aviation / Aleutian Airways / Kenai Aviation / Alaska Central Express / Transnorthern	No Bridge
	L2A	567	Grant Aviation / Aleutian Airways / Kenai Aviation / Alaska Central Express / Transnorthern	No Bridge
	A10	562	Ravn Alaska	No Bridge
	A11	126	Ravn Alaska	No Bridge
	A12	567	Ravn Alaska	No Bridge
	A13	692	Ravn Alaska	No Bridge
	A14	567	Ravn Alaska	No Bridge
	A15	691	Ravn Alaska	No Bridge
	A16	546	Ravn Alaska	No Bridge
B Concourse	B1	2,265	Jet Blue / State Administered	A3-60 / 119-125R
	B3	2,140	Jet Blue/ State Administered	A3-64 / 131-125R
	B4	2,224	Air Canada / Jet Blue / State Administered	A2-65 / 99
	B5	2,049	United	A2-65 / 99
	B6	2,396	Delta	A3-60 / 119
	B7	2,428	American / Sun Country	A3-60 / 119
	B8	2,429	Delta	A3-60 / 119-125R
	B9	2,427	Condor / Icelandair / State Administered	A3-60 / 119
	B10	0	State Administered	A3-68 / 141-125R
C Concourse	C1	2,617	Alaska	A2-70 / 107-125L
	C2	2,126	Alaska	A3-58 / 110
	C3	1,700	Alaska	A3-58 / 110
	C4	2,633	Alaska	A2-63 / 95-125R
	C5	1,712	Alaska	A3-60 / 119-125R
	C6	2,582	Alaska	A3-58 / 110
	C7	2,148	Alaska	A3-58 / 110
	C8	2,813	Alaska	A3-64 / 131-125R
	C9	1,813	Alaska	A3-64 / 131-125R

Source: Airport Staff, 2024

Passengers arriving at the Airport travel from the arrival gate to the “Great Hall” area. They exit through a monitored corridor out into the meet / greeter lobby, which offers benches for visitors waiting for arriving passengers. On either side of the exit corridor are landside concessions, serving visitors as they wait.

Passengers move down the central stairs / escalators or via the elevators on either side of the “Great Hall” to access baggage claim. Baggage claim consists of five sloped-plate claim devices: three on the north side of the “Great Hall” and two on the south / east side. Passengers then proceed to the passenger pick-up areas or down the stairs / escalator / elevators to the rental car facility, the parking garage, the train, one of the other public transit services at the Airport, or the regional airlines for connecting flights.

In addition to the passenger movement areas, the South Terminal has auxiliary areas to ensure the Airport’s operation. The basement level connects the “Great Hall” to the rental car facility, the parking garages, and the train, but it also houses mechanical space, concession storage, and Airport O&M space. Similarly, the ground and second levels have miscellaneous office and storage areas, as well as Airport O&M spaces. There is also an Armed Services Young Men’s Christian Association Military Lounge and visitor information booths.

The third level of the terminal accommodates the Airport administration offices and conference rooms over the C Concourse departure areas as well as miscellaneous office space, a conference room, and mechanical space over A and B concourses’ ticketing areas. Administrative areas are also located on the third level of the B Concourse ticketing area. TSA occupies a portion of this space, and the remaining space is vacant. The fourth level is primarily mechanical space, with a small area over C Concourse for additional administration space.

The South Terminal was constructed under the most current building codes. In fact, the renovation of A and B concourses in 2009 involved a significant seismic upgrade of the building to comply with the most recent regulations.

As previously stated, the South Terminal is in good condition. The exterior envelope includes a fully adhered, single-ply roof membrane. The roof membrane is in good condition. The building skin consists of a metal panel system, and aluminum framed doors and windows include double-pane glazing. Airport staff provides annual visual surveys and repairs any issues.

The mechanical and electrical systems are fully functional. According to the Airport staff, there is adequate generator power to provide for the building’s emergency demand.

The vertical circulation throughout the building—including stairs, elevators, and escalators—all appear to be functioning and in good condition. There are stair towers throughout the building to allow emergency evacuation of all floors to the ground level. Overall, there are no known life safety code issues; however, an exhaustive code analysis was not conducted.

2.7.3.2 Connector Corridor

The corridor connecting the North and South terminals was constructed in 2009. The corridor is a steel structure with a single-ply membrane roof. The exterior skin consists of masonry units on the airside and metal panel construction and double-pane, aluminum-framed glazing on the public side. The corridor is temperature controlled and has its own mechanical equipment. It was constructed under the most recent building codes and satisfies all accessibility requirements. Although the walking distance between the two terminals is great, the connector corridor offers passengers and staff a weather-protected route between the two buildings.

2.7.3.3 North Terminal

The North Terminal was constructed in 1982. Changes to the original building include a restroom addition in 1988, a baggage claim addition in 1993, alterations supporting relocations during the South Terminal renovations, renovation to provide a new Badge Office in 2001, and terminal door replacements in 2021. The most recent improvements were passenger lounge area renovations, bag handling system modifications, and flooring upgrades completed in 2022.

The approximately 290,000 square-foot building has an L-shaped footprint and was originally designed to accommodate international flight service at Anchorage. Flights traveling to Asia along the polar route once stopped in Anchorage to refuel and change crews. During that process passengers could exit the aircraft and use the concessions in the North Terminal. The North Terminal has 8 gates that can accommodate Group V aircraft (Boeing 747) though these gates are seldom used for passenger flights anymore. The North Terminal was primarily designed as an airside transfer facility with hold rooms and other facilities to service the in-transit population. Increased aircraft range capability and the opening of Russian airspace in 1989 eliminated the need for international flights to stop in Anchorage for refueling.

Cargo, in contrast, has increased at Anchorage. It is cost effective for cargo planes to maximize their cargo load and decrease the fuel load. Refueling at the Airport increases the amount of cargo the planes can carry. Arriving international cargo flights that change crews in the Airport use the North Terminal to process through U.S. Customs and Border Protection (CBP).

In addition to cargo technical stops, the North Terminal serves military and chartered flights. Modifications have been made to accommodate the security issues that occur when various

types of flights share the same terminal. For example, CBP and TSA procedures prevent international passengers from mixing with domestic passengers who haven't gone through the required security screening. A series of dividing walls separate the gate lounges in the North Terminal to keep the passengers segregated. The walls were constructed to allow the North Terminal to handle international arrivals, charter flights, military flights, and displaced domestic flights during the remodel of the A Concourse and B Concourse at the South Terminal. **Table 2-13** breaks down the square footage of the North Terminal by the various functions. **Figure 2-35** and **Figure 2-36** depict key plans for each level of the building.

Table 2-13
North Terminal Floor Space Allocation

Functional Area	Area (square feet)
Airline	29,200
Airport Operations / Administration	44,000
Baggage Claim	6,300
Baggage Handling (Inbound and Outbound)	17,100
Circulation	72,600
Concessions	7,900
Customs and Border Protection (CBP)	42,800
Holdrooms	8,000
MEP	18,600
Other (Vacant)	27,600
Restrooms	9,100
Security Screening Checkpoint	5,000
Total	288,200

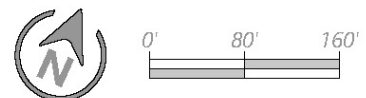
Source: MCG Explore Design, 2023; RS&H, 2023

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Figure 2-35
North Terminal – Basement and First Floors



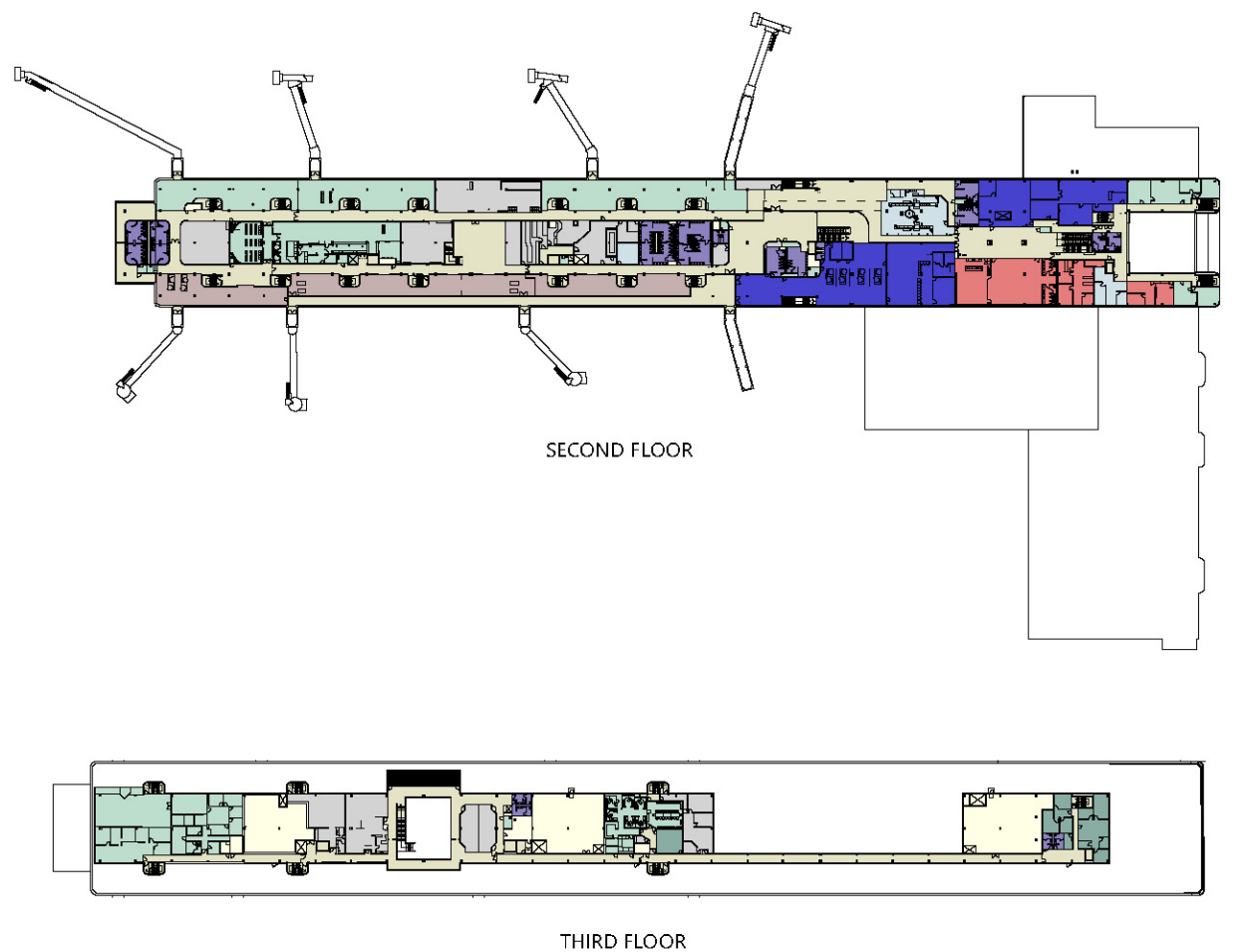
■ AIRLINE	■ MEP
■ AIRPORT OPERATIONS / ADMINISTRATION	■ OTHER (VACANT, STORAGE, MISC.)
■ BAGGAGE CLAIM	■ RESTROOMS
■ BAGGAGE HANDLING (INBOUND AND OUTBOUND)	■ SECURITY SCREENING CHECKPOINT
■ CIRCULATION	
■ CONCESSIONS	
■ CUSTOMS AND BORDER PROTECTION	
■ HOLDROOMS	



Source: MCG Explore Design, 2023; RS&H, 2023

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Figure 2-36
 North Terminal – Second and Third Floors



Source: MCG Explore Design, 2023; RS&H, 2023

The North Terminal is configured with ticketing and baggage processing on the ground floor and passenger boarding on the second floor. Passengers and visitors enter through a series of vestibules spaced along the front curb. On the north side of the building is the main lobby, with ticketing and domestic baggage claim at the south end. Adjacent to these public spaces are restrooms, checked baggage screening areas, stairs / escalators / elevators leading up to passenger screening on the boarding level, the Airport badging and dispatch office, as well as various offices and spaces for Airport operations, and cargo airlines.

Behind the ticket counters are airline offices. No airlines currently operate counters at the North Terminal, leaving this space vacant. In addition to Airport offices, there are bag handling belts. The bag make-up area is located directly behind the airline offices where the other end to load the aircraft.

Bags that must be screened by TSA are hand-delivered to the CBIS area between the ticket counters and the central escalators. The CBIS consists of a single screening EDS machine as well as several positions for hand screening. The baggage then travels out to the take-away belts.

The queuing area for the passenger screening checkpoint is at the top of a bank of stairs and escalators. There are also airline and tenant offices accessible to the public on the second floor above the lobby. The current office occupants include the CBP, U.S. Fish and Wildlife Service (USFWS), the Center for Disease Control, and cargo airline offices.

The TSA passenger screening checkpoint consists of two screening lanes and includes the latest in TSA equipment deployments, including a Whole-Body Imaging machine. After processing through the checkpoint, passengers travel around the outer edge of the concourse. Departure lounges flank the north and south walls of the building, with concessions spaces, offices, and restrooms primarily in the center.

CBP is in the process of adding automated screening kiosks for frequent flyers. These kiosks are expected to expedite international passenger processing.

As previously mentioned, the modifications made to segregate the various passenger groups has resulted in long, narrow, gate lounge areas that feel restricted. The majority of the concession spaces are vacant because the low enplanement counts at the North Terminal result in insufficient passenger activity to warrant full-time concessions service.

The condition of the North Terminal is good considering the age of the building. Generally speaking, the finishes are dated, but in serviceable condition.

There were originally eight gates at the North Terminal. Gates N1 and N3 have boarding bridges, but they are not operational. The bridge at Gate N2 was removed because the segregation of the gates rendered the area too small to be used as a holdroom, and the newer bridge was relocated to another gate. Of the five remaining gates, three have jet bridges in good condition. **Table 2-14** delineates the gate and bridge information.

Table 2-14
North Terminal Gates

Gate	Bridge Model	Status
N1	Wallard WS 750T	Not in use
N2	-	Bridge removed
N3	Wallard WS 750T	Not in use
N4	AS-64 / 131-125R	
N5	Wallard WS 750T	
N6	AS-64 / 131-125R	
N7	Wallard WS 750T	Retrofitted with air conditioning, drive, lift, and extension
N8	ABEX ABT 147 / 100	

Source: Airport Staff, 2024

Arriving international flights disembark primarily from Gates N4 and N6. These gates exit into a long corridor leading passengers to the passport inspection area. Next to this space, there is a training room and offices to support CBP operations. After passport inspection, passengers travel down to the ground floor baggage claim area to retrieve their luggage.

The baggage claim area within the CBP space consists of a single belt that wraps around the south, west, and north walls. There were originally two tug tunnels for baggage claim: one on the north side of the building and one on the south. The north tug room has been divided into leasable space and is no longer used as a bag drop. In addition to the claim belt, there is a bag slide for oversized luggage.

Once passengers claim their luggage, they proceed to the CBP screening area. Flanking both sides of the inspection area are CBP offices, restrooms and locker rooms, conference areas, suspect holding rooms, and other CBP spaces. After clearing the CBP process, international passengers exit into the main lobby, just south of the main escalators / stairs.

Arriving domestic passengers exit the concourse via a corridor just south of the TSA passenger screening checkpoint. They exit through a set of double doors and into the checkpoint queue space. Afterwards, customers descend the escalators / stair / elevators into the main lobby. Passengers proceed to the baggage claim lobby, which is located south of the ticket counters. The domestic baggage claim device is a single belt that is served by two drop belts. It is a sloped metal plate, for optimal capacity, and is in serviceable condition. Tugs delivering domestic baggage can drop them at the belt inside the enclosed tug area, or at the second belt on the west exterior wall of the enclosed tug area. This second belt was added during the South Terminal renovations due to the increased loads of arriving domestic flights. **Table 2-15** shows the lengths, in linear feet, of the baggage belts in the North Terminal.

Table 2-15
North Terminal Baggage Belts

Baggage Belt	Length (linear feet)
Bag Make/up	190
Customs and Border Protection Bag Claim	220
Domestic Bag Claim	300

Source: RS&H, 2024

The remainder of the ground level consists of offices for airlines and ground service operators, mechanical rooms, concessions storage, vacant spaces, and the Airport badging and dispatch office. There is a vehicle pass-through roughly in the middle of this office area, to allow tugs and service vehicles quicker access to the other side of the concourse.

The ground floor also consists of vacant office space formerly occupied by Airport Administration prior to relocating to the South Terminal. Of the approximately 150,000 square-foot ground floor, approximately 20,000 square feet of leasable space is vacant.

The third floor of the building is approximately 40,000 square feet in size. The majority of the space is dedicated to the mechanical equipment serving the building, but there are also spaces that function as V.I.P. lounges, concession offices, and Airport operations offices. The smoking lounge is located on this floor, just to the east of the large atrium that opens up to the concourse below. Approximately 9,000 square feet of leasable space on the third floor of the building is currently vacant.

In 2011, Schneider Structural Engineers performed a Structural Condition Assessment for the North Terminal. Schneider followed a Tier 3 evaluation outlined by ASCE 31-03 Seismic Evaluation of Existing Structures, complying with the 2009 International Building Code. The

assessment revealed that the existing structure was separated by ten seismic joints. The 1982 building consists of steel moment-resisting frames, and the 1993 baggage claim addition consists of steel columns and beams with reinforced masonry shear walls. The results of the assessment were that the North Terminal does not satisfy the 2009 International Building Code requirements for a design seismic or snow load event.

Generally speaking, the North Terminal is in good condition for the age of the facility. The exterior envelope consists of a single-ply roof membrane that is both mechanically fastened and fully adhered to the substrate. It is in good condition, and Airport staff perform annual visual surveys to repair any issues. The building skin consists of a combination of masonry bearing walls, a metal panel system, and aluminum framed doors and windows with double pane glazing. The metal panels are showing their age and some wear at the joints, but overall appear to be in fair condition. Similarly, the doors and windows appear to be functioning. Some areas observed, specifically on the exterior of the glass storefront portion of the west end of the concourse, had window sealant falling out. Inside the building, there are signs of water leaking into the building and dripping down the sides of the window mullions.

The mechanical and electrical systems are fully functional. The three large mechanical rooms on the third floor provide heating and air conditioning throughout the building. The system has three distinct zones. The main boiler room is located on the ground level, approximately in the center of the concourse. It houses four boilers that feed a loop serving the building. The system is also supplied by two additional boilers on the third floor to assist with the hot water supply in the building. Over the years, the hot water line has become restricted; however, no successful solution to improve the system has been found. Emergency power is provided by two generators. According to Airport staff, the service is ample for the building's emergency demand. The vertical circulation through the building—including stairs, elevators, and escalators—all appear to be functioning and in good condition. However, Airport staff believe some of the older escalators will no longer restart if they are ever turned off. There are stair towers throughout the concourse to allow emergency evacuation of all floors onto the apron level.

The recent seismic evaluation documents some significant structural deficiencies with respect to current building codes. Otherwise, there did not appear to be significant life safety code issues overall; however, an exhaustive code analysis was not conducted.

As stated, the condition of the North Terminal is good; however, the major concern for the building is its marginal utilization. A large percentage of the building is currently unoccupied, and the departure lounges are so rarely used that they could be considered unoccupied as well. Considering the current volume of international service at the Airport, the North Terminal is too

large. However, the building does provide the only CBP facility at the Airport. Therefore, it is a critical function for Airport operations.

2.7.3.4 Airport Administration

Airport administration functions are located in the South Terminal building with the exception of Operations, which remains on the first and third floor of the North Terminal, and Field Maintenance, which has a separate facility. South Terminal administration offices occupy space on the third floor of C Concourse above the departure areas. Mechanical space is located on the third floor above A and B concourses ticketing areas and on the fourth floor above the C Concourse departure area. Airport Operations and Administration combined occupy a total area of 69,552 square feet of terminal space.

2.7.3.5 Off-Airport Access System

The Airport is part of a complex network of roadways providing vehicle access throughout the surrounding municipality and the Airport. Described below are the Airport roadways, their general characteristics, number of lanes, roadway type (classification, off-Airport / on-Airport, secure, etc.), and secured Airport access gate locations. This information is summarized in **Table 2-16**.

The primary Airport access road from the east and south is West International Airport Road. West International Airport Road is used to access the East Airpark, passenger terminals, Lake Hood Airport, and the North Airpark via Postmark Drive. Access from the north is provided via Northern Lights Boulevard, which is also used to access areas on the west side of the Airport such as Point Woronzof and the Asplund Wastewater Treatment Facility. From Northern Lights Boulevard, access is also provided via Lake Hood Drive and Postmark Drive to the North Airpark, Lake Hood Airport, and the passenger terminals. Access from the south is provided via Jewel Lake Road and Raspberry Road. These roads are used to access the Kulis Business Park and the rest of the South Airpark. Raspberry Road is also used to access Kincaid Park, which is located off the Airport property.

As part of the public outreach process, several residents raised concerns about commercial traffic congestion along Northern Lights Boulevard and Raspberry Road, particularly during employee shift changes. A desire was expressed to shift traffic away from Northern Lights Boulevard and onto International Airport Road to the extent possible. Both Northern Lights Boulevard and Raspberry Road are owned and managed by the Municipality of Anchorage (MOA). MOA partners with DOT&PF in a transportation planning process called the Anchorage Metro Area Transportation Solutions (AMATS). AMATS published an Official Streets and Highways Plan which assigns functional classifications to roadways within the MOA. This

classification scheme prohibits freight traffic on Northern Lights Boulevard west of Wisconsin Avenue unless it is for delivery or business in the area.

Table 2-16
On-Airport Roadways

On-Airport Roadway	Number of Lanes	Classification / Notes
Postmark Drive	2, one center turn lane	Connects International Airport Road and Northern Lights Boulevard; minor arterial; provides access to North Airpark, North Terminal, U.S. Post Office
Lockheed Ave, Rockwell Avenue, Hughes Avenue, North Tug Road / De Havilland Avenue	2	Provides access to North Airpark leaseholds
Lake Hood Drive	2	Connects Northern Lights Boulevard and Postmark Drive; provides access to snow storage facility and northern edge of Lake Hood Airport
South Aircraft Drive / Apron Road (secure) / South Tug Road (secure)	2	South Aircraft Drive begins at Aircraft Drive and continues south across Postmark Drive and International Airport Road. There is an access gate at the terminus of South Aircraft Drive northwest of the Runway 25R end. Beyond access gate E21, South Aircraft Drive turns into Apron Road (perimeter road), goes around the eastern end of the runways, and turns into South Tug Road, which accesses the Kulis Business Park, the South Airpark, and goes around the western end of the runways before terminating at the fuel farm.
Old International Airport Road	2	Provides access to East Aircraft via Jewel Lake Road; acts as a service road for airfield and aircraft related vehicles that operate in the AOA
West 50th Avenue	2	Provides access to East Airpark leaseholds from Old International Airport Road.

Source: RS&H, 2024

A potential replacement road called Logistics Drive, which runs parallel to Postmark Drive between Northern Lights Boulevard and De Havilland Avenue, was recommended in previous Airport planning efforts. Logistics Drive will allow for additional development in the North Airpark, which includes the FedEx and UPS leaseholds.

2.7.3.6 On-Airport Access and Circulation Roads

Heading west toward the Airport, International Airport Road becomes a one-way Airport loop road that is used to access the South Terminal, where the majority of commercial passenger flights operate. The Airport loop road begins where the Airport return road connects into the

loop road. The Airport return road creates a third lane on the left that turns into the entrance lanes for rental car return and public parking facilities. The Airport loop road expands into four lanes just after the rental car and parking entrance lanes as it curves toward the terminal curbside. Prior to reaching the terminal curb, an access road splits off from the loop road to the left and leads to the FAA ATCT, commercial vehicle hold lot, and the lower-level commercial vehicle curb. The four-lane loop road splits into the two-lane upper departure and two-lane lower arrival level roadways. The upper departure level roadway widens into four lanes, with the right-most lane used for vehicle unloading. The next lane to the left is used for maneuvering, and the remaining two lanes serve as bypass lanes. The lower arrival level roadway widens into three lanes, with the right-most lane used for vehicle loading. The center lane is used for maneuvering, and the leftmost lane is used as a bypass lane.

Adjacent to the lower arrival level roadway is a four-lane commercial vehicle curb. Separating the lower arrival level roadway and commercial vehicle curb is the ground transportation island used for commercial vehicle loading and unloading. Passengers waiting for ground transportation can wait either outside on the island curb or inside the enclosed passenger waiting areas on the island. The ground transportation island is connected to the Transportation Lobby on the arrival level.

At the end of the terminal curb, the roadways merge back into a three-lane roadway. The public parking and rental car exit lanes add a fourth lane on the left, which turns into the Airport return road. The remaining three lanes direct traffic eastward away from the Airport. After the International Airport Road and Postmark Road intersection, the three lanes are reduced to two lanes heading east.

Access to the North Terminal is provided via the two-lane Postmark Drive from International Airport Road. From Postmark Drive, heading north, the entrance to the North Terminal Airport loop road is on the left just prior to Taxiway V and Tom Wardleigh Drive. The Airport loop road widens to five lanes. Two of these lanes turn into the entrance for the public parking area. One lane turns into the commercial vehicle curbside roadway, and the remaining two lanes curve towards the single level terminal curbside roadway. At the terminal curbside, one additional lane is added for vehicle unloading and loading. At the end of the terminal curbside, the right-most lane goes to the terminal curbside at the South Terminal and the left-most two lanes merge back with the two commercial vehicle curb lanes and exit at Postmark Drive. No dedicated Airport return lane exists at the North Terminal.

Curbside dimensions, number of lanes, and the private and ground transportation vehicle allocations at the curbside are summarized in **Table 2-17**. Ground transportation vehicle curbside allocations are depicted in **Figure 2-37**.

The Airport shuttle is a free service that transports passengers, employees, and other Airport users between the South Terminal, Employee Parking Lot, and Rental Car facility every 15 minutes. The shuttle serves the North Terminal (southern end of the curbside) on demand. Shuttle service from the North Terminal can be requested via a dedicated telephone in the North Terminal.

Public transit bus service to the Airport is provided by People Mover Bus via Route 40 and Route 65. The People Mover bus drop-off / pickup location is at the southeast end of the commercial vehicle curb at the South Terminal.

A commercial vehicle staging area is also located at the South Terminal. The commercial vehicle hold lot consists of six lanes. The commercial vehicle hold lot is split almost evenly between charter buses and taxicabs. Charter buses in the commercial vehicle hold lot serve mainly the A and B Concourses.

Charter and tour buses drop off and pick up at various South Terminal locations, as presented in **Table 2-17**. At the North Terminal, drop-off and pick-up areas are located along the inner and outer curbsides.

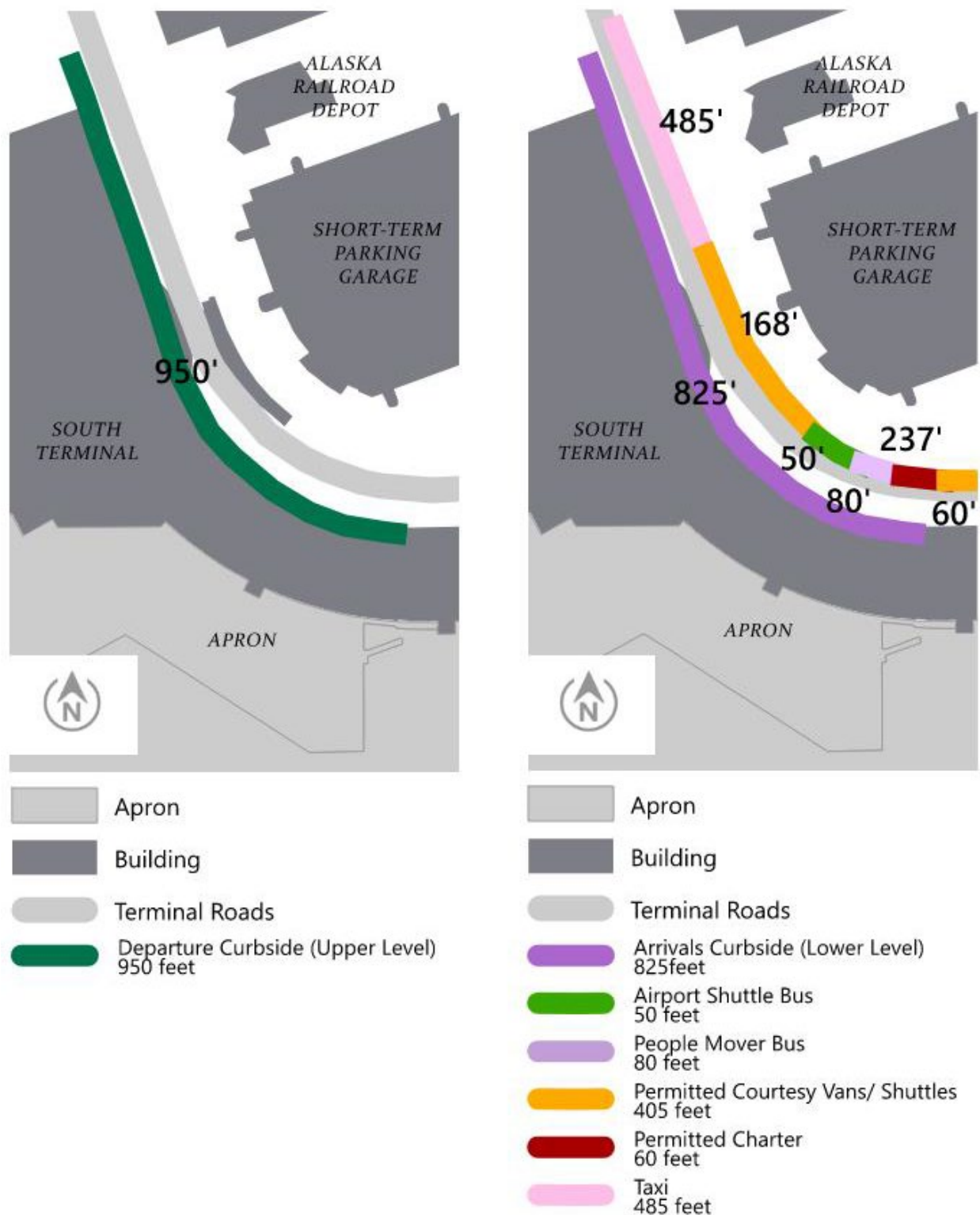
Table 2-17

Terminal Curbside and Charter Bus Staging Area Inventory

Concourse / Curb / Area	Number and Type of Lanes	Curbside Length/Stalls	Vehicle Usage
South Terminal Curbside			
Upper Departures Level	4 (1 drop-off, 1 maneuvering, 2 bypass)	950 feet	Private vehicle drop-offs, commercial vehicle drop-offs
Lower Arrivals Level	3 (1 pick-up, 1 maneuvering, 1 bypass)	825 feet	Private vehicle pick-ups
Commercial Vehicle Curb	4 (1 pick-up / drop-off, 1 maneuvering, 2 bypass)	1,080 feet	Airport shuttle (drop-offs and pick- ups, 50 feet) MOA People Mover bus (drop-offs and pick-ups, 80 feet) Permitted courtesy vans / shuttles, off- Airport shuttles, and limos (pick-ups only, 405 feet) Charter buses (drop- offs and pick- ups, 4 dedicated stalls, but only 1 along the curb, 60 feet) Taxicabs (pick-ups only, 9 dedicated stalls, 405 feet) Taxicab staging (80 feet)
North Terminal Curbside			
Inner Curb	2 (1 drop-off, 1 bypass)	400 feet	Private vehicle (drop-offs and pick- ups) Commercial vehicle (drop-offs only; includes 2 charter bus stalls)
Outer Curb	2 (1 drop-off, 1 bypass)	330 feet	Commercial vehicle (pick-ups only) includes 2 charter bus stalls)
Connector between North and South Terminal	2 (1 drop-off, pick-up, 1 bypass)	2 stalls	Charter bus stall
Commercial Vehicle Staging			
South Terminal Commercial Vehicle Hold Lot		≈70 stalls	Primarily taxicabs and airport shuttles
South Terminal Charter Bus Staging		9 stalls	Charter bus
North Terminal Charter Bus Staging		3 stalls	Charter bus

Source: RS&H, 2024

Figure 2-37
Passenger Terminal Curbside Allocation



2.7.3.7 Parking

Public parking facilities are available at the North and South terminals. At the South Terminal, short-term parking is available in the parking garage, and long-term parking is available in the surface lot. There are 30- and 90-day maximum stays at the South Terminal short-term garage and long-term lot, respectively. The South Terminal short-term garage construction improvements were undertaken in Summer of 2023 and 2024. The purpose of the project included repairing pavement, improving lighting, and restriping stalls. The stall restriping resulted in additional parking stall count compared to before construction.

At the North Terminal, short-term parking is available with a maximum stay of 10 days. In addition, a free cell phone lot is available at the North Terminal for drivers awaiting deplaned passengers. The cell phone lot is located in the area where DOT&PF employees also park. During the workday, 15 stalls are available. At night and on weekends, 30 stalls are available. The number of stalls in each public parking lot is summarized in **Table 2-18**. Public parking lot rates are summarized in **Table 2-19**. Employee parking stalls counts are summarized in **Table 2-20**.

Table 2-18
Public Parking Stalls

Public Parking Facilities	Stalls
South Terminal	
Short-Term Garage	1,235
Short-Term Oversize Vehicle	85
Long-Term	893
North Terminal	
Short-Term	210
Park, Ride, & Fly Parking Lot (Economy)	291
Cell Phone Lot	15

Source: ANC Airport Staff, 2023

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Table 2-19
Public Parking Rates

	South Terminal (Short-Term Garage)	South Terminal (Long-Term Lot)	North Terminal (Short-Term Lot)
First 30 minutes	No charge	No charge	No charge
31 minutes to 1 hour	\$3.00	\$2.00	\$3.00
1 to 2 hours	\$6.00	\$5.00	\$5.00
2 to 3 hours	\$10.00	\$9.00	\$8.00
3 to 4 hours	\$13.00	\$11.00	\$11.00
4 to 5 hours	\$14.00	-	-
4 to 24 hours	-	\$13.00	\$13.00
5 to 24 hours	\$16.00	-	-
Maximum per week	-	\$78.00	\$78.00
Maximum Stay	15 days	90 days	15 days

Source: ANC Airport Website, <https://dot.alaska.gov/anc/parking-transport.shtml>, 2024

Table 2-20
Employee parking stalls

Employee Parking Facilities	Stalls
South Terminal	
Employee	893
Airport Administrative Offices	20
North Terminal	
Employee	172
Auxiliary	75
FAA Tower	72
Parking Revenue Gate	11

Source: ANC Airport Staff, 2023

Note: FAA Tower stall count is for existing ATCT that will be demolished and replaced

2.7.3.8 Rental Car Facilities

The rental car facilities are located in a parking structure directly to the east of the South Terminal. With the exception of a few satellite parking surface lots, the entire rental car operation is located within the parking garage. The rental car facilities operate in a co-located parking garage in a semi consolidated rental car operation. The rental car counter areas are located on the first floor of the building directly across from the South Terminal. Each rental car company operates their ready return areas on a dedicated floor of the building. The top floor of

the parking structure is dedicated to storage and overflow for all of the rental car companies. The quick turn-around and fueling facility servicing the rentals cars are both located within the rental car structure as well. The parking structure also contains the rental car company offices.

Vehicle Rental Facilities

The consolidated rental car facility in the Passenger Terminal Complex is home to all of the on-Airport rental car customer service centers and quick-turn-around facilities. However, prior to its construction in 2007, rental car companies operated out of a number of locations around the Airport. Some of these companies still retain these facilities for use as car maintenance and storage facilities.

Avis Car Rental, Alamo Car Rental, and Budget Car Rental occupy three separate facilities in the East Airpark, all on lots leased by Alaska Sales and Service. In total, the three lots occupy 180,000 square feet where between 600 and 700 cars are maintained and stored for the three brands. For more information regarding the facilities in the East Airpark, refer to **Section 2.6.2**.

2.7.3.9 Alaska Railroad Depot

2.7.4 Air Cargo Facilities

This section includes information on the existing cargo parking positions, as well as a summary of the cargo carriers. This information is also delineated in **Table 2-21** and depicted **Figure 2-20**, **Figure 2-21**, **Figure 2-22**, and **Figure 2-23**. Air cargo tenants / subtenants are described by geographic area.

2.7.4.1 Cargo Parking Positions

Air cargo parking positions are summarized in **Table 2-21** and depicted in **Figure 2-38**.

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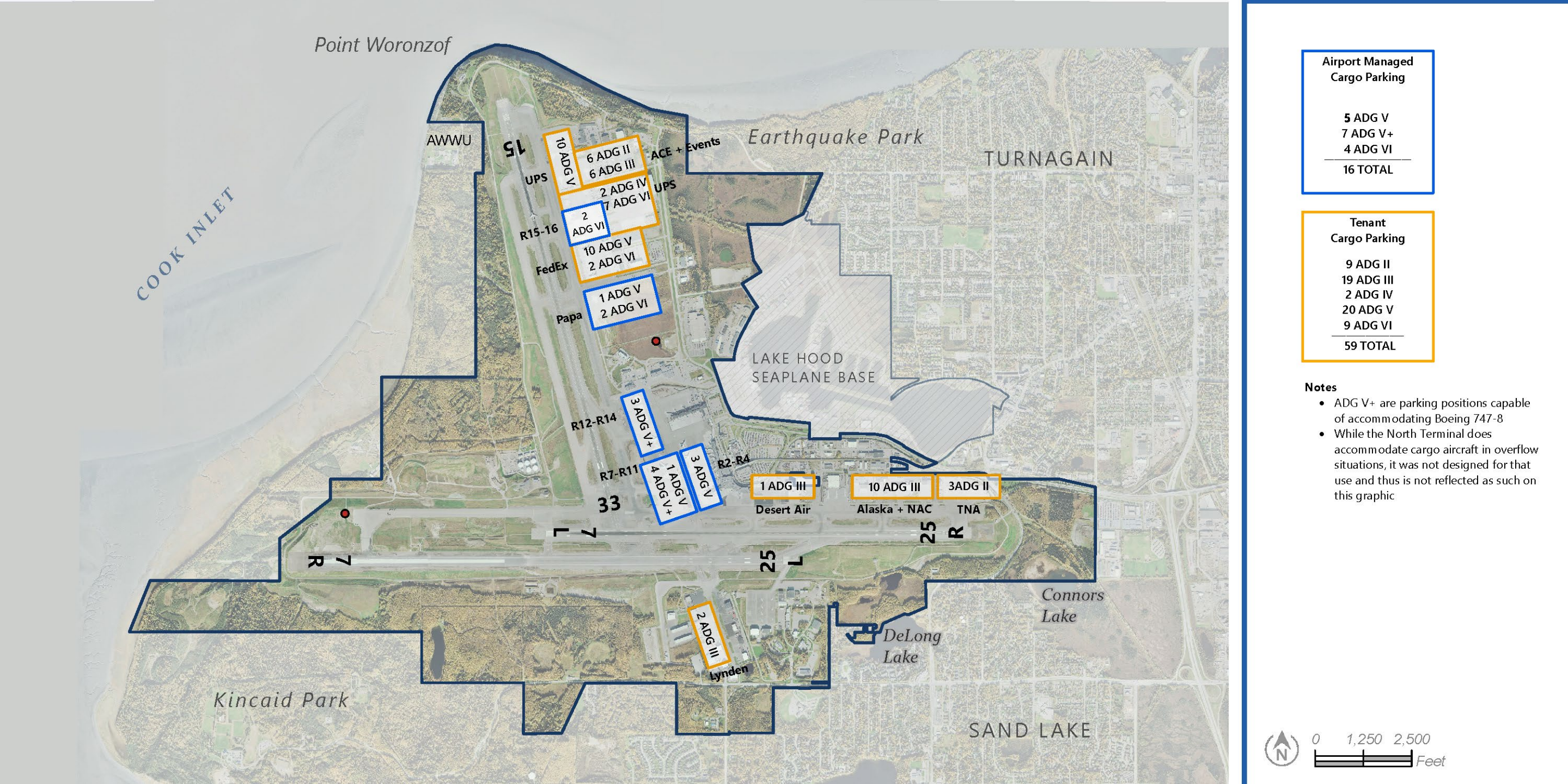
Table 2-21

Air Cargo Aircraft Parking Positions

Location	Parking Position / Tenant (total #)	Design Aircraft Accommodated
Terminal Apron	R2, R3, R4, R7 (4)	ADG-V
Terminal Apron	R8, R9, R10, R11 (4)	B747-8 specific
Terminal Apron	R12, R13, R14 (3)	B747-8 specific
Terminal Apron	R15, R16 (2)	ADG-VI
North Airpark	P1 (1)	ADG-V
North Airpark	P2, P3 (2)	ADG-VI
North Airpark	FedEx (10)	ADG-V
North Airpark	FedEx (2)	ADG-VI
North Airpark	UPS (2)	ADG-IV
North Airpark	UPS (7)	ADG-VI
North Airpark	UPS / Atlas / Polar (10)	ADG-V
North Airpark	Ace (6)	ADG-II
North Airpark	Everts (6)	ADG-III
East Airpark	Desert Air (1)	ADG-III
East Airpark	Alaska (7)	ADG-III
East Airpark	Northern Air Cargo (3)	ADG-III
East Airpark	TransNorthern Aviation (3)	ADG-II
South Airpark	Lynden (2)	ADG-III

Source: RS&H, 2023

Figure 2-38
Air Cargo Aircraft Parking Positions



Some tenants have expressed interest in expanding their operation, and their footprint, at the Airport. Of note, large facilities that have environmental entitlement and are slated for construction and use are:

- FedEx ANCA facility, North Airpark
- Alaska Cargo and Cold Storage, North Airpark
- NorthLink Aviation air cargo terminal, South Airpark

This topic, as well as the specific projects, is discussed in additional detail in **Chapter 4, Facility Requirements**.

2.7.4.2 Cargo Carriers

Listed below are some of the major Airport cargo carriers that currently provide cargo and mail services to approximately 49 destinations⁴². Some of the cargo carriers are briefly described below.

- Alaska Airlines Cargo (East Airpark)
- Alaska Central Express (ACE) Air Cargo (North Airpark)
- Atlas Air / Polar Air Cargo (North Airpark)
- Desert Air (East Airpark)
- Everts Air Cargo (North Airpark)
- FedEx (North Airpark)
- Kalitta Air (East Airpark)
- Lynden Air Cargo (South Airpark)
- Northern Air Cargo (East Airpark)
- Ravn Alaska (East Airpark)
- TransNorthern (East Airpark)
- UPS (North Airpark)

Alaska Airlines Cargo / Hangar (East Airpark - Buildings 282 & 283)

Alaska Airlines is a Seattle-based airline offering both passenger and cargo service to and from its ANC hub. In addition to their corporate offices, Alaska Airlines' cargo terminal is used for customer service, warehousing, sortation, aircraft storage, and vehicle parking. Apron space is the chief limiting factor with this site. The Alaska Airlines cargo aircraft fleet consists of three Boeing 737-700F freighters and one Boeing 737- 800F freighter, as of June 2024.

⁴² Ted Stevens Anchorage International Airport website, <http://www.dot.state.ak.us/anc/>, 2014.

Alaska Central Express (ACE) Air Cargo (North Airpark – Building 108)

Alaska Central Express (ACE) Air Cargo is an intra-Alaska cargo carrier specializing in small package services. ACE Air Cargo's main operation hub is in Anchorage. Scheduled service is offered for destinations in south Alaska, and chartered passenger and cargo service is provided statewide. ACE Air Cargo also offers connecting service to the Lower 48 States. The airline owns and operates a small fleet of Beech 1900C, one of which is configured to transport both passengers and cargo. The ACE Air Cargo building provides space for administrative offices, warehouse, and a hangar. The site also includes an aircraft parking apron that is connected to the airfield via Taxiway S.

Atlas Air / Polar Air Cargo (North Airpark - Building 102)

Atlas Air and Polar Air Cargo lease building and apron space from UPS in the North Airpark. Atlas Air operates via a charter and long-term wet lease. A wet lease is when an airline provides the aircraft, crew, maintenance, and insurance (ACMI; also provide other applicable flight permits) to a lessee. Atlas Air is marketed as one of the largest airlines to offer ACMI services. The parent company of Atlas Air, Atlas Air Worldwide Holdings, is also the majority-owner of Polar Air Cargo. As a result, Atlas Air is contracted to operate some aircraft on behalf of Polar Air Cargo.

Polar Air Cargo is an international cargo airline that operates via charter and long-term ACMI lease. Atlas Air / Polar Air Cargo operates Boeing 747-8F, Boeing 747-400F, Boeing 777-200F, Boeing 767-300F, and 737-300/-400/-800 series aircraft.

DesertAir (East Airpark - Buildings 276 & 279)

DesertAir started operating in Alaska in 2001, providing year-round charter cargo services to rural Alaska and Part 135 on-demand service. DesertAir currently serves over 200 locations with direct non-stop all cargo service from the Airport. DesertAir has operations in four facilities within the East Airpark that provide charter cargo services within Alaska. The fleet is comprised of DC-3 aircraft.

Everts Air Cargo (North Airpark - Building 107)

Everts Air Cargo is an intra-Alaska cargo airline that has been serving Alaskans since 1996. The airline headquarters is in Fairbanks, but all scheduled flights originate in Anchorage. The airline primarily transports freight and mail, with the U.S. Postal Service (USPS) being the primary client. Everts Air Cargo is also contracted to fly supplies and workers to the North Slope for ConocoPhillips. Everts Air Cargo has six aircraft based at the Airport. The fleet consists of McDonnell Douglas MD-80, Pilatus PC-12, Cessna 208 Grand Caravan, McDonnell Douglas DC-6, and Curtis Wright C-46 aircraft.

The Everts facility includes an office, warehouse, adjoining aircraft parking apron, and a vehicle parking lot.

FedEx (North Airpark - Buildings 115, 116, 120, 121, 122, 123, 124 & 170)

FedEx Corporation is an American global courier delivery service (Integrated Carrier) company headquartered in Memphis, Tennessee. The company operates a major air cargo handling facility at the Airport. The Airport facility is also FedEx's primary courier delivery services processing center for the State of Alaska including the local Anchorage market area.

FedEx employs over 1,100 people (including 400 based pilots) at its Anchorage hub. The hub is the origin or destination for 28 flights on a typical day. The FedEx operations area consists of parking positions for 12 widebody aircraft, a taxilane that extends from Taxiway U on the south to Taxiway T on the north, and various ground service equipment storage areas all located adjacent to the main cargo processing buildings. Ten positions are capable of accommodating ADG-V aircraft and two positions are capable of accommodating ADG-VI aircraft.

The FedEx complex includes space for warehousing, equipment maintenance buildings, ground service equipment storage and maintenance, cargo processing and sortation, aircraft storage, office work, employee training, snow storage, and employee parking. FedEx also has a dedicated fire suppression water system.

Lynden Air Cargo (South Airpark - Buildings 313, 314, 353 & 373)

Lynden Air Cargo is a scheduled and charter air cargo airline that serves Alaska and the Pacific Northwest. Lynden Air Cargo is part of a larger family of transportation companies that provide shipping and logistics services. Lynden provides scheduled cargo service to Nome, Kotzebue, Bethel, and other airports with flag-stop service. Lynden operates under a TSA Full All-Cargo Aircraft Operator Standard Security Program and the Certified Cargo Screening Facilities (CCSF) plan that allows Lynden to accept freight from entities that are certified as a CCSF. Lynden currently operates one Lockheed L-382 Hercules aircraft out of the facility, generating over 800 cargo operations each year. Lynden Air Cargo uses its facilities for cargo storage (including cold storage), maintenance, aircraft storage, deicing, and snow removal.

Northern Air Cargo (East Airpark - Buildings 277, 284, 285, 286, 289, & 290)

Northern Air Cargo is an intrastate all-cargo airline that has been in business since 1956. The airline provides scheduled and on-demand service to communities throughout Alaska. Mid-July through mid-September is the peak freight volume period for Northern Air Cargo-almost doubling the volumes during these months-mostly due to transportation of construction commodities and seafood.

The fleet has ungauged to Boeing 737-300, Boeing 737-400, Boeing 737-800, and Boeing 767-300 series aircraft. This change has allowed Northern Air Cargo to transport a larger quantity of freight than the Douglas DC-6 aircraft operated historically.

Northern Air Cargo occupies multiple facilities in the East Airpark for cargo processing and sorting, maintenance, equipment storage, office, aircraft storage, and vehicular parking. Northern Air Cargo's sister company, Northern Air Maintenance Services, operates out of the South Airpark.

Ravn Alaska (East Airpark - Building 273)

Ravn Alaska is an intra-Alaska passenger and cargo airline that operates from the A Concourse in the South Terminal. Ravn's corporate facilities are located in the East Airpark. The Ravn Alaska fleet based in Anchorage consists of seven Bombardier Dash 8 Series-100 aircraft.

TransNorthern Aviation (East Airpark - Building 292)

TransNorthern Aviation is an on-demand passenger and cargo airline that operates at the Airport. TransNorthern's Anchorage-based fleet consists of four Super DC-3s (two in passenger configuration and two in cargo configuration), two Metroliner IIIs, and one Beechcraft 99. TransNorthern currently provides weekday FedEx and UPS freight delivery service to Kodiak, Kenai, and Homer.

UPS (North Airpark - Buildings 101, 102, 103, 108, 110, & 114)

UPS is an international, integrated cargo carrier. UPS has intercontinental hubbing operations at the Airport. Virtually all cargo is deplaned and re-enplaned at the Airport as transfer cargo. UPS operates a large Regional Hub on a 36.5-acre site east of Taxiway R, between Lockheed Ave and Taxiway T. Building 110 is used as a warehouse and customer service center. Building 114 includes space for customs clearance, operations, sorting, maintenance, warehouse storage, and a city station center. The UPS leasehold includes 11 widebody aircraft parking positions, two of which are preferentially leased from the Airport (R15 and R16). The nine dedicated UPS aircraft parking positions accommodate two ADG-IV aircraft and seven ADG-VI aircraft. The R15 and R16 positions accommodate ADG-VI aircraft.

Vehicle parking for UPS employees is located in a parking lot east of Building 110. A large parking lot is also located at the west terminus of Lockheed Ave.

UPS acquired buildings and apron space in 2019 that was previously operated by Alaska CargoPort. The new lease area includes Buildings 101, 102, and 103. UPS leases those buildings to subtenants, including Atlas Air and Polar Air Cargo. UPS does not currently (as of June 2024) occupy any space within those buildings. However, UPS does sometimes use the apron space

within its expanded leasehold north of Lockheed Avenue for its operation. Otherwise, that apron space is also currently (as of June 2024) subleased to Atlas Air and Polar Air Cargo.

The UPS north complex has 10 wide-body aircraft parking positions, each of which has its own hardstand and fueling hydrant pit. These positions accommodate Boeing 747-400 aircraft but operators sometimes park Boeing 747-8 aircraft on some positions which limit access to adjacent positions. The remaining apron area is used to store ground service equipment (GSE) and for cargo staging.

UPS and USPS entered an expanded partnership in April 2024 which will make UPS the primary air cargo provider for USPS. UPS will transport the majority of USPS air cargo in the United States under this agreement.

2.7.5 General Aviation Facilities

Listed below are some of the major Airport general aviation providers / facilities. Each general aviation provider is briefly described below. General aviation facilities at the Lake Hood Airport are excluded.

- Alaska Frontier Constructors (South Airpark)
- Anchorage Executive Airpark (South Airpark)
- Atlantic Aviation (South Airpark)
- Global Rides (South Airpark)
- Great Circle Flight Services (South Airpark)
- Guardian Flight (East Airpark)
- Iliamna Air Taxi (South Airpark)
- LifeMed (East Airpark, South Airpark)
- ROTAK Helicopters (South Airpark)
- Security Aviation (South Airpark)
- Signature Flight Support (South Airpark)
- State Administered General Aviation Facilities (North Airpark)

Alaska Frontier Constructors (South Airpark - Building 301)

Alaska Frontier Constructors is a construction firm. The company subleases a facility along South Aircraft Place (Building 301). The site is 4.9 acres and is leased by 6250 South Airpark, formerly Northern Holding, LLC. The building occupies a 29,137-square-foot footprint and provides AOA access. Their facility contains a hangar and office space. The building is in excellent condition. Alaska Frontier Constructors is the only tenant on the lot. The only aircraft that are stored within the facility are owned and operated by Alaska Frontier Constructors for their corporate

purposes. Alaska Frontier Constructors owns and operates a Jet A fuel tank and contracts out deicing and snow removal services.

Anchorage Executive Airpark (South Airpark - Buildings 302 & 303)

Anchorage Executive Airpark occupies one of the largest general aviation lots in the South Airpark with 10 conventional hangars, each varying in size but are approximately 80 feet by 80 feet. Each facility has a two-story section for office space on each end. An apron is located between the two hangars with access to Taxiway R. Vehicle parking is located adjacent to the building and is adequate for current use.

The Anchorage Executive Airpark hangars are individually owned, with the exception of Hangars 1 and 2, which are jointly owned by the Providence Medical Center and the Yukon-Kuskokwim Health Corporation. Providence Medical Center uses its hangars for LifeMed operations, which provide emergency medical flights out of the Airport to rural Alaska using three Lear 35s and one King Air 200. They conduct approximately 2,400 operations per year statewide, the majority of which originate in Anchorage. A total of 21 corporate aircraft are currently based within the Anchorage Executive Airpark.

In 2007, Anchorage Executive Airpark Association constructed a 20,000-gallon Jet A underground fuel farm to allow self-serve fueling by Association members. The fuel farm has an annual flowage of 500,000 gallons.

Atlantic Aviation (South Airpark - Buildings 334, 336, & 337)

Atlantic Aviation is a fixed base operator that provides general aviation services from several buildings in the South Airpark. Atlantic Aviation provides the following services: Jet A fuel, deicing, lavatory and oxygen services, aircraft storage, aircraft maintenance, a pilot's lounge, and flight planning to general aviation traffic. The facility includes two large buildings and several other support buildings. Building 334 is a cluster of fuel tanks and support facilities associated with Atlantic Aviation's fuel tank facility. They have the capability to fuel aircraft via truck or dispenser.

Global Rides (South Airpark - Building 324)

Global Rides provides general aviation services in the South Airpark. The facility includes a multi-story building providing office and aircraft storage with AOA access. Global Rides subleases to the following companies: RBG Bush, The Ride, Arctic Rides, Top Ride, McKinley Capital Management, and Pacific Diversified Investments. Global Rides hangars nine corporate aircraft and conducts an estimated 100 operations per year.

Great Circle Flight Services (South Airpark - Building 309)

Great Circle Flight Services is a full service, fixed-based operator providing fuel, ground handling, customs and immigration clearance, and a pilot's lounge for business aircraft. Great Circle staff have access to the adjacent apron through secured doors from their facilities to the apron, as well as secured gates onto the apron adjacent to their facility.

Guardian Flight (East Airpark - Buildings 277 & 291)

Guardian Flight provides air medevac services around the country. Guardian Flight transports medical, surgical, cardiac, trauma, pediatric, neonatal and pediatric Intensive Care Unit, and burn patients from rural facilities to tertiary care facilities. Guardian also provides non-urgent prearranged medical charters to or from any Alaskan community. The Guardian fleet includes the Beechcraft King Air C90B, the Pilatus PC-12, the Airbus H130 helicopter, the Airbus AS350B3e helicopter, Beechcraft King Air 200, Learjet 45, and Cessna Caravan 208.

Iliamna Air Taxi (South Airpark - Building 312)

Iliamna Air Taxi is an on-demand charter service that operates out of the East Airpark. Iliamna subleases a portion of the Signature Flight Support facility (Building 312).

Iliamna Air Taxi is based primarily in the small Alaskan community of Iliamna. Iliamna Air Taxi provides daily scheduled passenger service between Iliamna and Anchorage and charter passenger service statewide. The carrier has Pilatus PC-12 aircraft and Cessna 207 aircraft.

LifeMed (East Airpark - Buildings 246 & 302)

LifeMed provides air medevac services, providing patient services. The LifeMed fleet includes the Bell 407 helicopter, Beechcraft King Air 200, Cessna 208 Grand Caravan, Learjet 31, Learjet 35, and Learjet 45. LifeMed conducts flight crew training in the subleased offices. LifeMed also subleases space from Anchorage Executive Airpark (Building 302) in the South Airpark.

ROTAK Helicopters (South Airpark - Building 356)

Building 356 was constructed in 2019 to accommodate ROTAK Helicopters. ROTAK Helicopters is a general aviation helicopter operator. The company specializes in heavy lift and emergency services operations that require helicopters. This facility is their corporate headquarters.

Security Aviation (South Airpark - Building 309)

Security Aviation provides on-demand, air charter passenger services and ground handling services for transient aircraft. They operate year-round but are busiest in May through the end of October. They have contracts with the military and oil field companies. Security Aviation subleases space from Ross Anchorage, LLC and uses the facility as office space and aircraft storage for seven aircraft. The fleet includes the Learjet 45 and Cessna Conquest II. A total of 25 vehicle parking spaces are available for employees and customers.

Signature Flight Support (South Airpark - Buildings 312 & 360)

Signature Flight Support operates a full service, fixed-base operator in the South Airpark. The facility includes an executive terminal and hangar. Signature Flight Support sublessees include Iliamna Air Taxi.

Signature is a wholly owned subsidiary of BBA Aviation, a worldwide provider of flight support services. Signature Flight Support provides a range of general aviation services including aircraft basing, airframe and engine repair and maintenance, ground handling, and aircraft charters. Ground handling for regional commercial traffic is done in this facility. Signature's aircraft fuel vending and ground handling for domestic and international traffic is accomplished in the South Airpark.

State-Administered General Aviation Facilities

A general aviation parking area called "Charlie Parking" is located directly east of the Field Maintenance Facility, adjacent to Postmark Drive. The paved apron previously accommodated small propeller driven aircraft; however, parked aircraft have been relocated and Charlie Parking will be decommissioned as a general aviation parking area. Facilities on that site are planned for demolition to enable the construction of a new Air Traffic Control Facility on that site. Construction of the new Air Traffic Control Facility is anticipated to start in 2025 and to be completed by 2029.

2.7.6 Airport/Airline Support Facilities

The term "Airport / Airline Support" refers to land uses that directly support the operation of airlines, such as airline administrative offices, aircraft maintenance facilities, air cargo warehouses, and buildings that house aircraft ground handling equipment. It also includes land uses that support the operation of the Airport, such as passenger terminals, police and fire stations, bulk fuel storage facilities, and Airport maintenance facilities.

Listed below are some of the major non-state-administered Airport / airline support facilities. State Administered Airport / airline support facilities are described in **Section 2.7.7** through **Section 2.7.10**. Each support facility is briefly described below.

- Airline Support (North Airpark, East Airpark)
- Alaska Airlines Corporate Offices and Aircraft Maintenance Facility (East Airpark)
- Anchorage Fuel Service Corporation (West Airpark)
- ConocoPhillips / Shared Services Aviation (South Airpark)
- FLOAT Alaska Real Estate (East Airpark)
- Integrated Deicing Services (North Airpark)
- International Aviation Services, Inc. (North Airpark, East Airpark)

- LSG SkyChefs (East Airpark)
- Naniq Global Logistics (South Airpark)
- Northern Air Maintenance Services (NAMS)
- Pegasus Aviation Services (North Airpark, East Airpark)
- Ryan Air Inc (South Airpark)
- Swissport Ground Handling (East Airpark)
- Thompson and Associates (North Airpark)
- Troy Air (South Airpark)

Airline Support, Inc. (North Airpark - Building 174; East Airpark – Building 234)

Airline Support, Inc. provides airline ground support, in-flight catering, and crew transportation services at the Airport. Airline Support, Inc. is located east of Postmark Drive and north of Lake Hood Drive (Building 174) on a 4.82-acre site in a facility totaling approximately 16,170 square feet. The facility is equipped with approximately eight loading docks. With its location situated east of Postmark Drive, Airline Support, Inc. does not have AOA access.

Airline Support, Inc. (Building 234) is also located at the corner of West 50th Avenue and South Aircraft Drive and north of the railroad corridor on a 0.98-acre site. The building has a footprint totaling approximately 8,470 square feet. Airline Support, Inc. does not have AOA access from its East Airpark location.

Alaska Airlines Corporate Offices (East Airpark - Building 270)

The Alaska Airlines corporate office and employee parking is located at the far west end of the East Airpark just south of Old International Airport Road. The lot for Building 270 totals 2.84 acres and includes two buildings with a total footprint of 39,618 square feet. The other vehicular parking lots total 1.24 acres. Only Lots 8A, 9, and 14A provide direct AOA access.

Building 270 was constructed in the early 1980s. It contains the Alaska Airlines GSE maintenance facility (24,000 square feet) and administrative offices (16,000 square feet).

Alaska Airlines Maintenance and Engineering Hangar (East Airpark - Building 287)

Building 287 was constructed in 2018 by Alaska Airlines. It accommodates the Alaska Airlines aircraft maintenance operation. The facility can accommodate two Boeing 737 MAX 10 aircraft within the hangar and two Boeing 737 MAX 10 aircraft on the apron. The apron positions are most often used to accommodate remain overnight (RON) aircraft when the terminal gates are fully occupied. The hangar also accommodates Alaska Airlines regional operations administration staff, relocating that function from Building 270.

Anchorage Fueling and Service Company and Menzies Aviation (West Airpark – Building 400)

Anchorage Fueling and Service Corporation (AFSC) owns the fuel farm infrastructure and Menzies Aviation is contracted to operate the fuel farm on behalf of AFSC. AFSC is an airline fuel consortium and corporate entity with the goal of providing fuel at lower cost to consortium members. AFSC is comprised of 21 airlines that operate at the Airport. Consortium members include the following airlines:

- Air China
- Alaska Airlines
- American Airlines
- Asiana Airlines
- Atlas Air
- Cathay Pacific Cargo
- CargoLux Airlines
- China Airlines
- China Cargo Airlines
- Delta Air Lines
- Eva Air Cargo
- FedEx
- Kalitta Air
- Korean Air Cargo
- National Airlines
- Nippon Cargo Airlines
- Polar Air Cargo
- Singapore Airlines Cargo
- Suparna Airlines
- United Parcel Service
- Western Global Airlines

The AFSC consortium member airlines independently purchase Jet A fuel in bulk for their use. The Jet A fuel is either shipped by pipeline from Nikiski (located 70 miles southwest of Anchorage), by rail from Fairbanks, or by ocean tanker from Southeast Asia. This fuel is first delivered to the AFSC fuel storage facility at the Don Young Port of Alaska. The AFSC fuel storage facility at the Port of Alaska comprises nine storage tanks with a total capacity of approximately 21.0 million gallons (or 500,000 barrels) of Jet A fuel.

Jet A fuel is pumped from the Don Young Port of Alaska southwest to the Airport via a 12-inch underground fuel pipeline, called the Crosstown Pipeline. The fuel pipeline crosses the north side of the Airport towards Point Woronzof and alongside Runway 15-33 before terminating at the AFSC Airport Fuel Storage Facility in the West Airpark.

The AFSC Airport Fuel Storage Facility (Building 400) was constructed between 1995 and 2000, with the four most recent tanks added in 2012. The AFSC Airport Fuel Storage Facility has a capacity of 34.2 million gallons or 814,000 barrels of Jet A fuel. The smallest tank holds approximately 1.35 million gallons (or 32,000 barrels), and the largest tank holds approximately 4.40 million gallons (or 105,000 barrels). In addition to the main storage tanks at the Airport, there is a smaller “breakout” tank that is used to store fuel removed from aircraft and unavailable for in-to-plane fueling. AFSC tanker trucks are used to remove fuel from planes or deliver fuel to aircraft parked in locations not served by the hydrant system.

Most fuel is pumped from the AFSC Airport Fuel Storage Facility through underground pipes to approximately 186 hydrant fuel pits located around the Airport. The hydrant system extends to the majority of aircraft parking positions at the North Terminal and South Terminal, as well as various areas in the North Airpark, South Airpark, and East Airpark. Whenever Jet A fuel is transferred either at the Don Young Port of Alaska or the Airport, it must settle for at least 24 hours upon arrival before being introduced to the hydrant system.

Menzies Aviation representatives maintain a 12-14-day supply of Jet A fuel at the Airport at all times. Historically, into-plane fuel flowage ranges from 25,000-30,000 barrels (approximately 1.05 to 1.26 million gallons) of Jet A fuel on low activity days, which generally occurs on Mondays and Tuesdays. Into-plane fuel flowage can reach 50,000 barrels (approximately 2.1 million gallons) of Jet A fuel on days of higher activity, which generally occurs on Wednesdays, Thursdays, and Saturdays.

The AFSC fuel supply handles approximately 90% of all fueling at the Airport. The other 10% of fueling is provided by private fuel service companies that are not a part of the consortium, such as International Aviation Services, Atlantic Aviation, Signature Flight Support, and Great Circle Flight Services. For these fuel providers, fuel is delivered to aircraft primarily through mobile tank trucks. This includes Jet A and AvGas (100LL) as well as automotive fuels. AFSC only handles Jet A fuel and does not provide any AvGas (100LL) fuel to piston aircraft operators at the Airport. Non-member airlines may choose to purchase fuel from AFSC, but they pay a premium price reflecting that they are not consortium members and are not servicing the consortium’s debt.

The AFSC and Menzies Aviation buildings (two buildings identified as Building 153) in the North Airpark comprise a footprint area of approximately 15,820 square feet on a lot totaling 6.53

acres. This facility serves as the primary administrative offices and operating headquarters for AFSC and Menzies Aviation. Fueling pump trucks are stored, maintained, and staged at this location. The trucks are deployed to transfer fuel from the fuel pit hydrants to aircraft. There is also a small wash bay and a fuel load rack where mobile fuel trucks can be filled to deliver fuel to aircraft that are not parked near a fuel hydrant. The administration offices and operating headquarters have direct AOA access.

FLOAT Alaska Real Estate (East Airpark - Buildings 273 & 276)

FLOAT Alaska Real Estate subleases space to various cargo and airport / airline support companies. Space in Building 273 is subleased to Ravn Alaska and Northern Pacific Airways. Building 276 is subleased to DesertAir.

Integrated Deicing Services (IDS) (North Airpark – Building 101)

Integrated Deicing Services (IDS), which is a subsidiary of Inland Group of Companies, operates at more than 50 airports in four countries, providing deicing services for multiple tenants. IDS subleases space within the UPS north complex. Facilities include an equipment warehouse and administrative office.

International Aviation Services, Inc. (IAS) (North Airpark – Building 106; East Airpark – Building 243)

International Aviation Services, Inc. (IAS) is an aviation fueling company exclusively serving the Airport. The fuel handled by IAS is trucked from the Port of Alaska to one of two on-Airport storage facilities. One storage area is located in the North Airpark (Building 106) and the other is located in the East Airpark (Building 243).

In the North Airpark, the North Fuel Tank and Delivery Facility includes four 20,000-gallon jet fuel tanks and two 12,000-gallon AvGas tanks. IAS fuel trucks and loading equipment are also stored at this location. In addition to the fuel storage tanks, this site includes a loading rack where fuel trucks can be refilled. IAS owns and operates 22 fuel trucks varying in capacity from 1,000 to 3,000 gallons for AvGas or 3,000 to 10,000 gallons for Jet A fuel. IAS does not have direct AOA access from its North Airpark location. However, fuel trucks can easily access North Tug Road or Postmark Drive to travel to other parts of the Airport.

IAS is the second-largest fuel service provider at the Airport. IAS provides fueling services to most (if not all) airlines operating at the Airport that are not members of the AFSC consortium.

IAS serves both based and transient aircraft by taking delivery of, storing, and handling into-plane fueling needs. Unlike the AFSC, which only distributes Jet A aircraft fuel, IAS also distributes AvGas (100LL) and automotive fuels including gasoline and diesel. All fuel is trucked

from the Port of Alaska fuel storage facilities, which are owned by various Alaska petro-chemical companies such as Tesoro, Petro Star, Flint Hills Resources, and Global Fuel.

LSG Sky Chefs (East Airpark - Building 280)

LSG Sky Chefs is an airline caterer that occupies about 20,000 square feet in the northwest corner of Building 280, which they sublease from Delta. Building 280 is located at the southeast corner of the South Aircraft Drive and Old International Airport Road intersection on a lot that is 11.19 acres. The building, which has a footprint totaling 87,711 square feet, was constructed in the late 1960s. The eastern half of the building was added in the early 1970s. The facility is adequate for their current operation, and LSG Sky Chefs has no near-term plans to expand. Direct AOA access is provided.

Naniq Global Logistics (South Airpark – Buildings 361, 374, 375 & 376)

Naniq Global Logistics provides international and domestic freight forwarding, custom brokerage, and warehousing solutions from several locations around the country. Naniq Global Logistics opened their facility in the South Airpark at ANC as their corporate headquarters and to provide their global customer service center and custom house brokerage function.

Northern Air Maintenance Services (NAMS) & ConocoPhillips / Shared Services Aviation (South Airpark - Buildings 315, 316, & 323)

Northern Air Maintenance Services (NAMS) and ConocoPhillips / Shared Services Aviation both sublease space from Troy Air in Building 316. NAMS subleases 25,800 square feet of building and land. ConocoPhillips / Shared Services Aviation subleases 9,030 square feet of building and land. Building 316 is used today as a repair station that is licensed to and operated by NAMS as a Part 145 repair station and services mostly ConocoPhillips / Shared Services aircraft including De Havilland Q400 aircraft, the Prudhoe Bay / Deadhorse-stationed CASA-212 aircraft, and De Havilland DHC-6 Twin Otter aircraft. The facility includes hangar space to accommodate maintenance of one Boeing 737-700 aircraft at a time, and a second hangar that accommodates parts storage, offices, ground equipment and maintenance of smaller Prudhoe Bay / Deadhorse-based Shared Services aircraft. In 2010, ConocoPhillips / Shared Services Aviation constructed these two fabric shelter hangars (Building 315 and 323) on the apron at their South Airpark facility to reduce snow removal and aircraft deicing requirements. The third aircraft, such as a Boeing 737-700 aircraft, could be stored in the NAMS repair hangar. Building 316 also provides for administrative functions, including reservations for the ConocoPhillips / Shared Services Aviation operation. Direct AOA access to this facility is provided via Taxiway T.

ConocoPhillips / Shared Services Aviation, originally ARCO, began in 1982 as a small corporate aircraft group operating under 14 CFR Part 91. The initial purpose of the operation was to ferry rotation-shift oil field workers from satellite locations around the greater Prudhoe Bay area to the Prudhoe Bay Airport (now closed), Kuparuk Airport and the Prudhoe Bay / Deadhorse

Airport for transportation to Anchorage and Fairbanks. These flights were typically completed via company-owned Boeing 727-100 series aircraft with gravel kits installed to allow operation on the gravel Prudhoe Bay and Kuparuk runways. The operation was merged with BP during the early 1990s and now ConocoPhillips and BP jointly control the aircraft. ConocoPhillips / Shared Services Aviation is the designated operator of the aircraft. In approximately 1998, the Prudhoe Bay Airport was closed, and all Prudhoe Bay flights were then routed to the Prudhoe Bay / Deadhorse Airport. By this time the aircraft had been changed to Boeing 737-200's, and the ARCO oil assets in Alaska had been sold to Phillips Oil Company. These aircraft were serviced through a contract with Alaska Airlines, who also provided supplemental and "loaner" aircraft for use during peak periods and while Shared Services Aviation aircraft were being serviced.

Over the years, the Shared Services Aviation operation has changed agents and is now serviced by NAMS. The service initially included using NAMS backup aircraft and a leased terminal at the Prudhoe Bay / Deadhorse Airport. NAMS has since sold their aircraft. As previously mentioned, ConocoPhillips / Shared Services Aviation has also changed their core aircraft fleet to include De Havilland Q400 aircraft, CASA-212 aircraft, and De Havilland DHC-6 Twin Otter aircraft. All passenger flights for ConocoPhillips / Shared Services Aviation depart and arrive from Gate L1 in the South Terminal.

Pegasus Aviation Services (North Airpark - Building 169; East Airpark - Buildings 226 & 266)

Pegasus Aviation Services provides a majority of the contract aircraft maintenance services at the Airport and a broad range of other services, including deicing, ground handling, flight operations, passenger operations and ticketing, and cargo handling. Their leasehold in the North Airpark (Building 169), located at the intersection of Postmark Drive and Taxiway V, is approximately 2.37 acres with a building footprint of approximately 6,030 square feet. Pegasus Aviation Services uses this location as a GSE maintenance and storage facility. The facility does not have direct AOA access.

In addition to Building 169, Pegasus Aviation Services also occupies about 3,000 square feet of space in the basement of the North Terminal as an operations office as well as facilities in the East Airpark (Building 226 and 266).

Ryan Air Inc (South Airpark – Buildings 338, 339, & 340)

Ryan Air Inc is an intra-Alaska passenger and cargo airline that specializes in serving small communities throughout Alaska. The airline's passenger fleet includes 5-seat Cessna 207 and 9-seat Pilatus PC-12 aircraft while the cargo fleet includes Cessna 208, CASA 212-200, and Saab 340 aircraft. These facilities are the airline's corporate headquarters.

Swissport Ground Handling (East Airpark - Building 241)

Swissport Ground Handling (Swissport) facilities are located along the railroad corridor in the East Airpark between West 50th Avenue and Old International Airport Road. The three lots total 3.16 acres and comprise a total building footprint of 31,487 square feet.

Swissport's GSE facility is located on the north side of the railroad embankment, at the southeast corner of South Aircraft Drive and West 50th Avenue (Building 241). The GSE facility is situated on a lot totaling 1.19 acres. The 13,683-square-foot GSE warehouse building located on this lot was initially constructed in 1973 and was expanded in 1990. Swissport also stores deicing fluid in two 10,000-gallon (Type 4 fluid) and one 5,000-gallon (Type 1 fluid) tanks at this facility.

Swissport reports occasional difficulty getting its deicing vehicles from this building to the AOA via South Aircraft Drive due to the restricted clearance (16'-7") of the railroad overpass. The only alternate route is nearly one mile long and involves driving east on West 50th Avenue to the Old International Airport Road intersection and then west to South Aircraft Drive. The lot does not have direct AOA access.

Thompson and Associates Deicing (North Airpark - Buildings 172 & 173)

Thompson and Associates Deicing is a snow removal company occupying two lots in the North Airpark. Thompson and Associates Deicing currently have contracts in place to remove snow from the UPS and FedEx aircraft parking aprons. They also have snow melting equipment available and are pioneering glycol recovery efforts during the snow removal process. Thompson and Associates does not have direct AOA access from its North Airpark facility.

Troy Air (South Airpark - Buildings 315, 316, & 323)

Troy Air subleases for a variety of airport / airline support and other uses. The building and land area leased by Troy Air is located at 6601 South Airpark Place and is a 7.46-acre site. Building 316 has a building footprint of 60,393 square feet and a building size of approximately 100,000 square feet. The Troy Air facility was constructed in 1982. Troy Air's facility has a 40,000-gallon underground water storage tank for its firefighting sprinkler system. There is a diesel fuel tank on the premises that fuels the sprinkler system pump engine. Subtenants include Northern Air Cargo / NAMS and ConocoPhillips.

2.7.7 Airport Field Maintenance Facility

The Airport Field Maintenance Department (Buildings 165, 167, and 177-187) is charged with the maintenance of Airport-owned and managed or common-use airside and landside facilities at the Airport and Lake Hood Airport. The Airport field maintenance facilities and equipment, as well as Field Maintenance Department operations such as snow removal and deicing operations, are described below.

2.7.7.1 Airport Field Maintenance Facilities

Field maintenance facilities occupy two general sites located in proximity to the U.S Post Office off Postmark Drive in the North Airpark. The first site is located west of Aircraft Drive and north of Tom Wardleigh Drive (Buildings 177–187). The second site is located west of Postmark Drive (Buildings 165 and 167). The buildings are depicted in **Figure 2-20** and listed in **Table 2-22**.

Buildings 177–187 are located on the first site located east of Postmark Drive on land totaling approximately 17.65 acres. Building space for the five main buildings comprises a footprint of 96,185 square feet. The buildings are currently used to store back-up vehicles and other Airport maintenance equipment. The first site currently does not have immediate AOA access to the airfield. However, the site is in close proximity to the Lake Hood Airport and a short distance from the AOA.

The second site, located west of Postmark Drive and north of Taxiway V, totals approximately 12.50 acres with building space from two buildings (Buildings 165 and 167) comprising a footprint of approximately 139,690 square feet. The larger building is the primary facility (Building 167). The facility is approximately seven years old and houses administration, equipment maintenance, and storage for vehicles that serve a primary immediate response function. Building 167 was constructed to store modern equipment that is larger in size than the old equipment. It also includes a warm storage area that houses the minimum equipment and vehicles needed for immediate access to the airfield. Additional equipment remains stored at storage facilities east of Postmark Drive.

A second building (Building 165), located on the second site, is the Quick-Turnaround Facility (QTF). This is where the primary snow and ice removal equipment is stored. The advantage of this facility is its centralized location on the airfield, which helps maintenance personnel achieve their goal of clearing snow and ice from the airfield in approximately 20 minutes. The QTF is also used to store most of the Airport's sand and deicing equipment and chemicals. A new liquid deicer storage tank was constructed in summer 2012, bringing the total number of liquid deicer storage tanks to three. This is sufficient to meet the requirements of the Airport for one average year. A vehicle fueling station, located adjacent to the QTF, provides fuel services to the Airport field maintenance vehicle fleet. Building 165 has adequate AOA access.

The third site is located in the South Airpark. Because of space constraints present in the first site, back-up Airport maintenance equipment is stored in the Fire Station No. 2 building and vacant hangars within the Kulis Business Park.

A summary of all Airport field maintenance facilities is included in **Table 2-22**. In total, the Field Maintenance Department has about 385 pieces of equipment, of which about 175 are large, drivable vehicles.

Facilities for Airport maintenance equipment storage is currently at capacity. Additional storage is needed to accommodate future growth. Despite plans to replace the roofs on the old maintenance buildings in 2013, the old field maintenance buildings (Buildings 177–187) east of Postmark Drive are obsolete and undersized to fit equipment. In the future, these facilities may need to be improved to accommodate warm storage needs.

Additional warm storage is also needed to store snow removal and deicing materials. After facing a shortage of deicing materials in the 2011- 2012 winter months, the Field Maintenance Department ordered extra sand for the following winter. However, this sand was stored outside. Warm storage or climate-controlled storage areas are preferable to prevent the sand from freezing and the need to chip it apart prior to use. Currently, some of the snow removal and deicing materials are stored in a building located in the West Airpark, south of the fuel farm.

Table 2-22
Airport Airfield Maintenance Facilities in Square Feet

Building	Administration & Shop	Vehicle Storage	Deicing Material Storage	Other Storage
Airfield Maintenance Facility	72,500	42,300	-	-
Quick Turnaround Facility	-	-	23,900	-
4055 Aircraft Drive	-	16,200	6,500	-
4166 Aircraft Drive	-	14,300	-	-
4100 Aircraft Drive	2,700	7,300	-	5,600
Old Fire Station 2	-	6,200	-	-
Total	75,200	86,400	30,300	5,600

Source: RS&H, 2024

2.7.7.2 Airport Field Maintenance Operations

Field Maintenance Department personnel provide and maintain safe aircraft movement surfaces, public roads, walkways, and other Airport infrastructure. This includes clearing snow and ice from common use airside and landside facilities. The Field Maintenance Department comprises approximately 110 personnel organized in three distinct sections: Field Maintenance, Equipment Maintenance, and Airfield Electricians.

The Field Maintenance section is responsible for daily airfield inspections, pavement maintenance, snow removal, drainage management, vegetation control, obstruction mitigation, and other required Airport maintenance. In addition, the section performs hazard mitigation and

general maintenance for the Lake Hood Airport, including aquatic weed harvesting, slip maintenance, and dredging. The Equipment Maintenance section services Airport-owned vehicles and equipment. In total, Equipment Maintenance maintains about 385 pieces of equipment, of which about 175 are large, drivable vehicles. These vehicles include snow removal equipment, heavy equipment, firefighting trucks, and light duty vehicles.

The Airfield Electricians section constructs, repairs, and replaces signs, lights, wind indicators, and other complex electrical systems on the airfield and in public use areas.

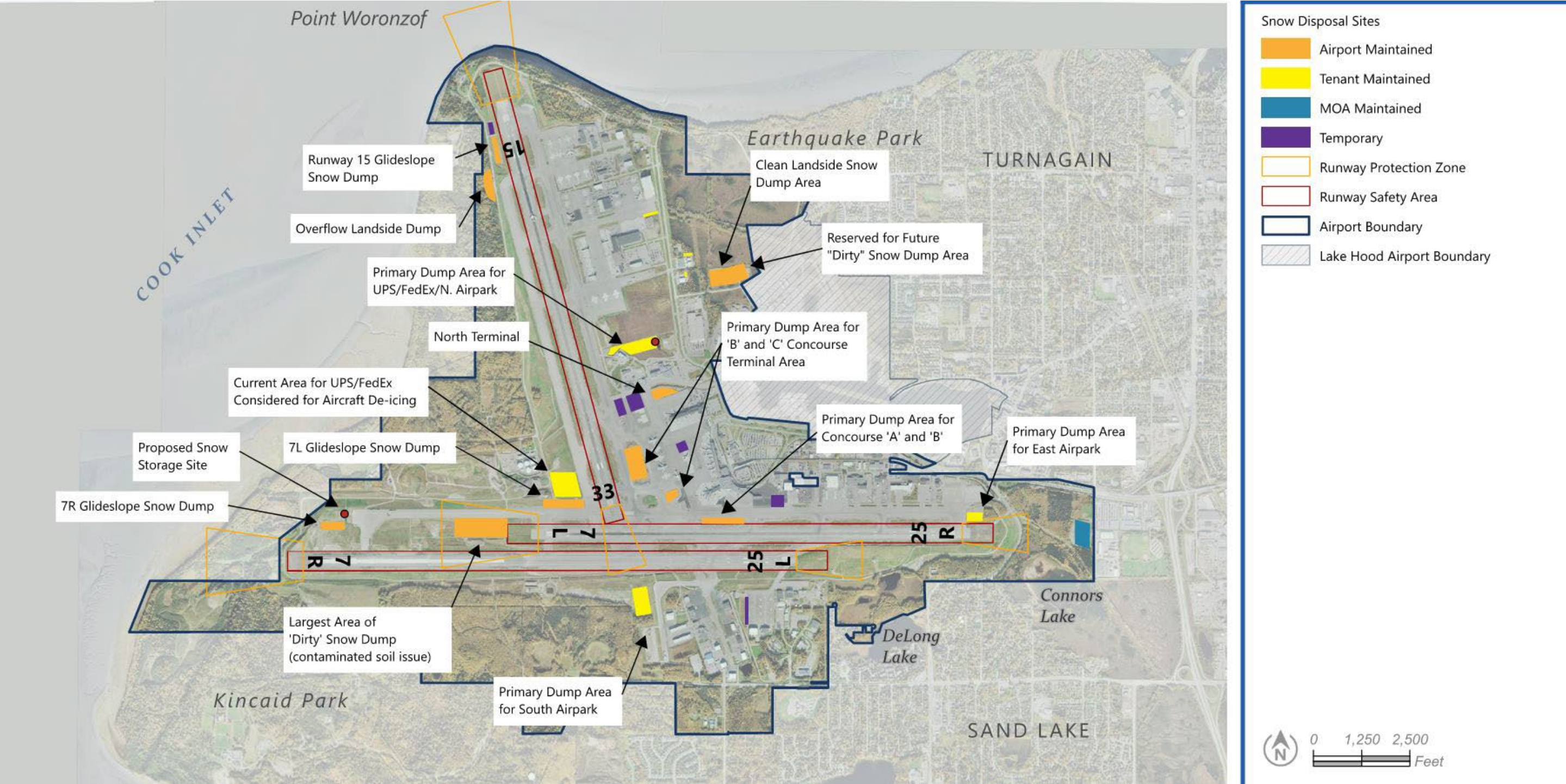
2.7.7.3 Snow Removal Operations

Snow removal is a major activity at the Airport. The Field Maintenance Department has designated multiple snow storage areas and snow disposal sites and follows an Annual Snow Removal Plan to guide them in the temporary placement and ultimate storage of snow removed from pavements. The general rule of thumb for snow disposal is that snow removed from airfield surfaces within the AOA fence is moved to disposal sites within the AOA fence line. A similar rule applies for snow that is cleared outside the AOA fence line—snow cleared from areas outside the fence is taken to disposal areas outside the AOA fence.

Snow Disposal Sites

Once snow is removed, it is moved by truck to various disposal sites, as depicted in **Figure 2-39**. The various snow disposal sites are classified as either containing "dirty" or "clean" snow. Dirty snow is generally defined as snow that may contain pavement and / or aircraft deicing chemicals and usually includes snow from within the AOA. Clean snow is defined as snow that is free of deicing chemicals and may be disposed at designated clean snow disposal sites.

Figure 2-39
Snow Dump Locations



Source: RS&H and HDR, 2014.
Note: MOA = Municipality of Anchorage.

2.7.7.4 Deicing Operations

The annual airfield and aircraft deicing activities at the Airport are a significant operation requiring a substantial logistical plan and large commitment of money by the Airport and tenants. The amount of aircraft deicing fluid used at the Airport is described in **Table 2-23**. Deicing operations can occur at any time of the year but are generally conducted between October and April by various Airport staff, operators, and users.

Table 2-23
Aircraft Deicing Fluid Used at ANC

Winter Season	Glycol (Gallons)
2023-2022	1,075,000
2022-2021	950,000
2021-2020	800,000
2020-2019	785,000
2019-2018	695,000
2018-2017	590,000
2017-2016	820,000
2016-2015	440,000

Source: ANC 2022-2023 End of Season Report

All parties involved must comply with numerous national, state, and local regulations in order to properly apply, recover, and monitor deicing fluids and stormwater runoff. The U.S. Environmental Protection Agency's (USEPA) issued a National Pollution Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) to the Airport in 2015 authorizing stormwater discharge. Subsequently, the Alaska Department of Environmental Conservation (ADEC) took primacy of the USEPA's NPDES permit program, now called the Alaska Pollutant Discharge Elimination System (APDES). ADEC issued an APDES General Permit to ANC in 2019.

The USEPA Water Quality regulations governing deicing activities have changed recently, mainly eliminating the ability to use urea as a pavement deicer. These new regulations may require the Airport to make various operational and facility changes as part of the master plan recommendations.

As of 2019, Lake Hood and Lake Spenard meet or exceed the Water Quality Standards established by ADEC.

2.7.8 Airport Fire and Police Facility

2.7.8.1 Facilities

The Airport Police and Fire Department is located on a 12.00-acre site at the western end of De Havilland Avenue north of Taxiway V. The ANC Safety Building (Building 151), referred to as Station No. 1, was constructed in 1991. The building footprint totals approximately 19,330 square feet and with a second floor, totals 28,840 square feet. There is an additional 33,700 square feet available for landside parking. The facility is equipped with offices, classrooms, evidence storage rooms, interrogation rooms, and an ammunition storage room. The vehicle bay is capable of storing three large “Striker” vehicles and a rapid Intervention Vehicle, with limited space remaining for police patrol vehicles.

Equipment and personnel from two vacated facilities were consolidated in the existing facility when it was built in 1991. The Police and Fire Department facility is currently space constrained as personnel for effectively two departments operate within a single facility. To offset space constraints, firefighting chemicals and vehicles are stored in other areas around the Airport, such as the old Field Maintenance Facility east of Postmark Drive.

The Police and Fire Department also uses Fire Station No. 2 (Building 335) for storage of out-of-service ARFF vehicles. The facility is located inside the fence adjacent to Carl Brady Drive in the South Airpark.

Two closed training facilities for the Police and Fire Department are also located in the South Airpark, west of Taxiway R. This includes an ARFF training facility and a firearms training facility. Both facilities will be demolished in the near future to enable the west extension of Taxiway Z.

Finally, the Airport has an Emergency Services Dispatch, or Airport Communications Center, to coordinate emergency responses at the Airport which is currently located with the North Terminal. However, ANC officials are considering relocating the Emergency Services Dispatch function to the Airport Safety Building in the near future.

2.7.8.2 Operations

The Police and Fire Department is unique because services are jointly operated within one department. Each service has a different mission but relies on shared resources. The Police and Fire Department consists of 60 officers and four K-9 units. Typically, there are 10 operational personnel on a shift at any time, with three dedicated firefighters. All of the officers in the department are dual certified to enable them to alternate between police and firefighting roles.

In its police role at the Airport, the Police and Fire Department is a self-contained, fully functional, independent law enforcement agency that completes its own cases, investigations, and arrests. It has the authority to remand to jail and follows up in court.

In its firefighting role at the Airport, the Police and Fire Department is required by the Airport's FAA FAR Part 139 Class I operating certificate to provide Index E requirements. This requires achieving a three-minute response time to the midpoint of the farthest runway, and the capability to respond to an incident with a minimum of three vehicles having a combined water / dry chemical agent capacity of 6,000 gallons. To meet these requirements the department typically responds to an alert with two Oshkosh 4500 "Striker" vehicles and one Rapid Intervention Vehicle. To satisfy the response times, the department stores these vehicles in Station No. 1 as well as Station No. 2 in the South Airpark. As part of the ARFF requirements under Part 139, the FAA also requires the ability to respond with ARFF support to a downed aircraft in the Knik Arm Inlet. To satisfy this requirement, the department contracts with a private agency (Cook Inlet Tug and Barge) and has other mutual aid agreements.

In addition to providing service for the Airport, the Police and Fire Department responds to all calls for police, fire, and medical intervention for the Lake Hood Airport, as well as providing mutual aid to surrounding agencies upon request. The department has two small aluminum hull boats, shared with the Airport Field Maintenance Department, to perform water rescues on Lake Hood. For winter rescue, the Police and Fire Department maintains two snow machines equipped with patient / equipment sleds. A summary of Police and Fire equipment is summarized in **Table 2-24**.

Table 2-24

Airport Fire and Police Department Facilities and Equipment

Building	Location	Square Feet	Parking Area	Equipment Capacity
Fire Station No. 1	North Airpark - Building 151	28,840	33,700	3 Oshkosh 4500 Vehicles, 1 RIV
Fire Station No. 2	South Airpark - Building 335	8,500	-	
Closed ARFF Training Facility / Firearms Training Range	South Airpark - Building 391	-	-	-

Make	Vehicle / Equipment Description	Water/Foam (gal.)	Dry Chemical (lbs.)
Ford	Rapid Intervention Vehicle (RIV 51)	300 / 120	500
Ford	Rapid Intervention Vehicle (RIV 52)	300 / 120	500
Ford	ARFF Stair Truck	-	-
Oshkosh	Engine 54 Oshkosh 4500	4500 / 630	500
Oshkosh	Engine 55 Oshkosh 4500	4500 / 630	500
Oshkosh	Engine 56 Oshkosh 4500	4500 / 630	500
Oshkosh	Engine 57 Oshkosh 4500	4500 / 630	500
Oshkosh	Engine 58 Oshkosh 4500	4500 / 630	500
Oshkosh	Engine 59 Oshkosh 4500	4500 / 630	500

Specialized Rescue Equipment	Purpose
Snowmachine Skidoo Tundra LT	Snow / Ice Rescue
Snowmachine Skidoo Tundra LT	Snow / Ice Rescue
Roughneck Boat, Rescue 2	Water Rescue
Trailer, Boat	Water Rescue
Trailer, Black Utility, Safety	General Emergency Response
Trailer Emergency Response	General Emergency Response

Fire Station No. 2 (South Airpark - Building 335)

Fire Station No. 2 is located inside the fence adjacent to Carl Brady Drive in the South Airpark within the Kulis Business Park. This building is approximately 8,500 square feet and currently stores two 1500 E-One vehicles. Fire Station No. 2 is being converted for Airport ARFF use as Station No. 2 by the Airport Police and Fire Department. In the future, up to two 1,500-gallon trucks and one firefighter may be stationed in the facility. This will provide faster ARFF response to the southern part of the airfield. In addition, police officers may operate out of the station for

more rapid access to South Airpark tenants. AOA access is gained through secured public access doors at the end of Mallone Street. Access is currently adequate for current and future needs.

Closed Airport Police and Fire Department – ARFF Training Facility and Firearms Training Facility (Building 391)

The closed ARFF training facility is located directly south of the Runway 7L threshold and west of Taxiway R in the South Airpark. The closed firearms training facility is located adjacent to the ARFF training facility. These facilities will be demolished in the near future to enable the west extension of Taxiway Z.

Airport Police and ARFF personnel currently use off-Airport facilities to train and maintain proficiency.

2.7.9 Other State-Administered Facilities

DOT&PF Airport Construction facilities are located adjacent to International Airport Road and north of West 50th Avenue. The facilities are maintained in a space totaling approximately 1.37 acres and in two buildings with a footprint of 5,118 square feet. The buildings are used by Airport staff for the management of Airport construction projects.

Electrical Vault (West Airpark - Building 402)

Located just south of the AFSC Fuel Storage Facility is an electrical vault that is owned and maintained by the DOT&PF.

Former ARFF Station No. 2 (West Airpark - Building 403)

The former ARFF Station No. 2 (Building 403) is located south of the fuel farm. This facility was vacated in 1991 when the existing Police and Fire Department station was constructed. The facility is currently being used for warm storage of equipment and deicing materials in addition to storage areas within the QTF (Buildings 165 and 167). The building is also used to store excess firefighting chemicals and Police and Fire Department vehicles.

DOT&PF Materials Lab (East Airpark – Building 222)

The DOT&PF materials testing laboratory is located in the northern part of the East Airpark near the intersection of International Airport Road and South Aircraft Drive. The facility is used for testing in support of the agency's effort to provide technical expertise in materials and engineering services. Direct AOA access is not provided from the lot.

2.7.10 FAA Facilities

The FAA owns land in the Airport vicinity, as well as leases land from DOT&PF. Described in this section are those FAA owned / leased areas with buildings where FAA employees work on a day-to-day basis. FAA equipment / infrastructure on the airfield are not described in this section.

Air Traffic Control Facility (Terminal Area - Building 504)

The existing FAA Air Traffic Control Facility is located north of West International Airport Road nearly equidistant between the north and south passenger terminals. Constructed and placed into operation in 1977, the FAA Air Traffic Control Facility consist of an Airport Traffic Control Tower (ATCT) containing air traffic equipment and FAA offices, and a 12,000 square-foot base building accommodating additional offices. The facility grounds are surrounded by a security fence, with gates at the main and employee entrances. The vehicle parking area has approximately 34,000 square feet supporting 75 vehicle parking spaces.

The FAA plans to replace the existing ANC ATCT and TRACON by 2029. Construction of the new Air Traffic Control Facility is anticipated to start in 2025. The replacement facility is planned to be constructed atop the general aviation parking area called “Charlie Parking”. The new facility will comprise an approximately 300-foot-tall tower and a two-story 40,000 square-foot TRACON building. The land currently occupying the existing FAA Air Traffic Control Facility will be transferred back to the Airport for reuse to accommodate other facilities.

Federal Aviation Administration Flight Inspection Building and Hangar (East Airpark - Buildings 274 & 275)

The FAA owns land in the East Airpark near the intersection of Old International Airport Road and South Aircraft Drive. This land area comprises 3.86 acres and is not owned by the DOT&PF. This land area is also referred to as the FAA in-holding lot. Buildings 274 and 275 are, respectively, an approximately 15,000-square-foot office / storage building for FAA Flight Inspection operations, and an approximately 42,000-square-feet hangar. The hangar is between 35 and 40 years old and functions to store aircraft used by the FAA to test and calibrate its NAVAIDs. Direct access to the AOA is provided to the south. The combined lease lot area comprises 2.07 acres and a small building with a footprint of approximately 1,100 square feet.

The centrally located lot could have revenue generation potential for the Airport if it were not owned by the federal government. The function of the FAA facility does not appear to be dependent on this particular location on Airport property. FAA has explored the possibility of exchanging the current site for facilities within the Kulis Business Park, but to date has elected not to do so. FAA has also considered, but rejected, a proposal to alter the western boundary of their lot to provide access from Old International Airport Road. An access would not provide the

office building with a sufficient setback to avoid damage from vehicle traffic in the resulting access corridor.

Federal Aviation Administration (East Airpark – Building 226)

The FAA subleases space in Building 226 from William and Lorraine Brooks. The sublease is located in the East Airpark in a building footprint totaling 17,504 square feet on a lot totaling 1.90 acres. Direct AOA access is not provided.

2.7.11 Other Facilities

A number of facilities are present on the Airport property that are typically not used for aeronautical purposes (e.g., the USFWS building and MOA snow storage area) or for both on- and off-Airport needs (e.g., rental car storage facilities and utility rights-of-way and corridors). This section provides a brief summary of some of those facilities.

United States Postal Service (North Airpark - Buildings 175 & 176)

The U.S. Post Office (Buildings 175 and 176) is located on a 22.7-acre site in the North Airpark off of Postmark Drive, just south of Lake Hood Drive. The facility's primary role is to store mail and freight. The main building has a footprint totaling approximately 273,000 square feet. However, the facility is also used for public retail postal services on the south side of the building. This facility has no direct airside access, but a special use access road directly connects the facility to North Tug Road across Postmark Drive. This allows airside vehicles (e.g., GSE vehicles) to access the U.S. Post Office facility without traveling on public roads. The northern lot also has a building with a footprint totaling approximately 9,170 square feet. Direct AOA access is not provided.

Avis, Budget, Alamo / National, Hertz Vehicle Storage (East Airpark - Buildings 213, 214, 231, 232, & 250)

Avis, Alamo / National, and Budget vehicle storage facilities are located in a cluster of lots along West 50th Avenue in the East Airpark. A combined total of about 700 cars are maintained and stored long-term on these lots. Vehicle rentals, short-term vehicle storage, and vehicle returns occur in the consolidated car rental facility adjacent to the main passenger terminal.

Avis subleases two buildings (Buildings 213 and 214) on conjoined sites in the East Airpark from Alaska Rent-A-Car. The facility is located near the intersection of West 50th Avenue and South Aircraft Drive. Building 214 is the main building and is two stories tall. The building is used as office space and as a maintenance garage. The lot is used for vehicle storage and also has a car wash facility.

Budget subleases Building 231 from Copper River Rentals, LLC which is located southeast of the Avis facilities. The Budget building is used as office space. The lot is used for vehicle storage.

Alamo / National subleases space (Building 232) from EAN Holdings for vehicle storage. The facilities are located south of West 50th Avenue, across the street from Avis. Direct AOA access is not provided for these facilities.

Hertz car storage facilities (Building 250) are subleased from Floyd & Sons Inc. These facilities are located along Old International Airport Road. In addition to the vehicle storage lot, Building 250 is used for vehicle maintenance.

Vacant Building (Previously Great Pacific Seafoods) (East Airpark - Building 262)

Building 262 is a vacant building that was previously leased by Great Pacific Seafoods for seafood processing and freight consolidation. The building has been vacant since 2017 and is available for lease as of June 2024. The facility is located along Old International Airport Road in the East Airpark. The building warehousing and administrative space.

ABC Motorhome and Car Rentals / Fly-In Restaurant (East Airpark - Buildings 267 & 268)

The ABC Motorhome & Car Rentals and Fly-In Restaurant occupy single-story buildings in the East Airpark. The Fly-In Restaurant has been in operation since 1992 and serves American and Asian cuisine. ABC Motorhome & Car Rentals is a family operated business that has been in operation since 1985. It offers sales and rentals of motorhomes and other vehicles.

Aero Anchorage (East Airpark - Building 286)

The Aero Anchorage building (Building 286) is located in the East Airpark. Aero Anchorage subleases space to various subtenants. Subtenants utilizing the facility for cargo purposes include Delta Airlines, Northern Air Cargo, Arctic Circle Enterprises, Frontier Flying Service, and Nippon Cargo Airlines. Aero Anchorage subleases space to companies for other purposes. These subtenants include Equant and Aeronautical Radio. Equant provides communications equipment for those working within the AOA.

U.S. Department of Commerce (South Airpark - Buildings 342 & 343)

The U.S. Department of Commerce leases a total of 11 acres in the South Airpark along Sand Lake Road. The facilities (Buildings 342 and 343) consist of two buildings with a combined footprint of about 24,000 square feet. The western portion of the site includes a tower that is topped with meteorological observation equipment.

The facility is used by the National Oceanic and Atmospheric Administration (NOAA) Anchorage Forecast Office. The office includes the Alaska Aviation Weather Unit, the Alaska River Forecast Center, and various electronics and maintenance units. The facility does not have AOA access, and its use is limited to meteorological observation and reporting.

U.S. Fish and Wildlife Service (South Airpark - Building 344) The USFWS leases 2.3 acres along Sand Lake Road, adjacent to the NOAA facility. The facility is comprised of a warehouse and storage yard used to store equipment and perform maintenance. The facility does not have AOA access, and its use is limited to storage and maintenance functions.

2.7.12 Infrastructure And Utility Services

This section describes the utility infrastructure and services used at the Airport. Utilities covered include electrical, natural gas, stormwater, public water, sewer, solid waste and recycling, and telecommunication services.

Electrical Services

Electricity is supplied to all developed areas of the Airport by the Chugach Electric Association. A distribution substation west of Spenard Road at the intersection of Old International Airport Road is the primary source of distribution for the Airport. Chugach Electric Association has a number of substations on Airport property. The Woronzof transmission substation is one such station that straddles the Airport boundary just north of the Asplund Wastewater Treatment Facility.

Additional electrical service comes from the Woronzof Substation located north of the Asplund Wastewater Treatment Facility. Chugach Electric Association is the electrical supplier for most of the Anchorage MSA with the exception of the Municipal Light & Power, which provides power to the northwest West Anchorage Planning Area.

Natural Gas Services

Natural gas is supplied by ENSTAR Natural Gas Company, serving nearly all developed areas at the Airport. ENSTAR installs and upgrades the natural gas infrastructure as needed.

Stormwater Services

The stormwater drainage system is owned, operated, and maintained by the DOT&PF. Rainwater and other runoff is collected in the stormwater drainage system.

Three drainage basins and nine drainage systems make up the Airport watershed. The stormwater is eventually discharged to surrounding bodies of water allowed by the NPEDS permit issued by the USEPA but subsequently transferred to ADEC. The permit requires mechanisms be in place to control discharge of pollutants into receiving waters. The existing stormwater drainage system is shown on **Figure 2-40**. For more information about the stormwater services, refer to the ANC Storm Drainage Master Plan, dated November 2000.

Stormwater drainage at the Airport is conveyed through five drainage areas, designated A, B, C, D, and E⁴³. The Airport has implemented a stormwater diversion program in these drainage areas to control runoff containing aircraft and pavement deicing materials. The primary purpose of the stormwater diversions is to reduce biochemical oxygen demand and nitrogen loading to Lakes Hood and Spenard. The diversions are operated on a continuous basis⁴⁴.

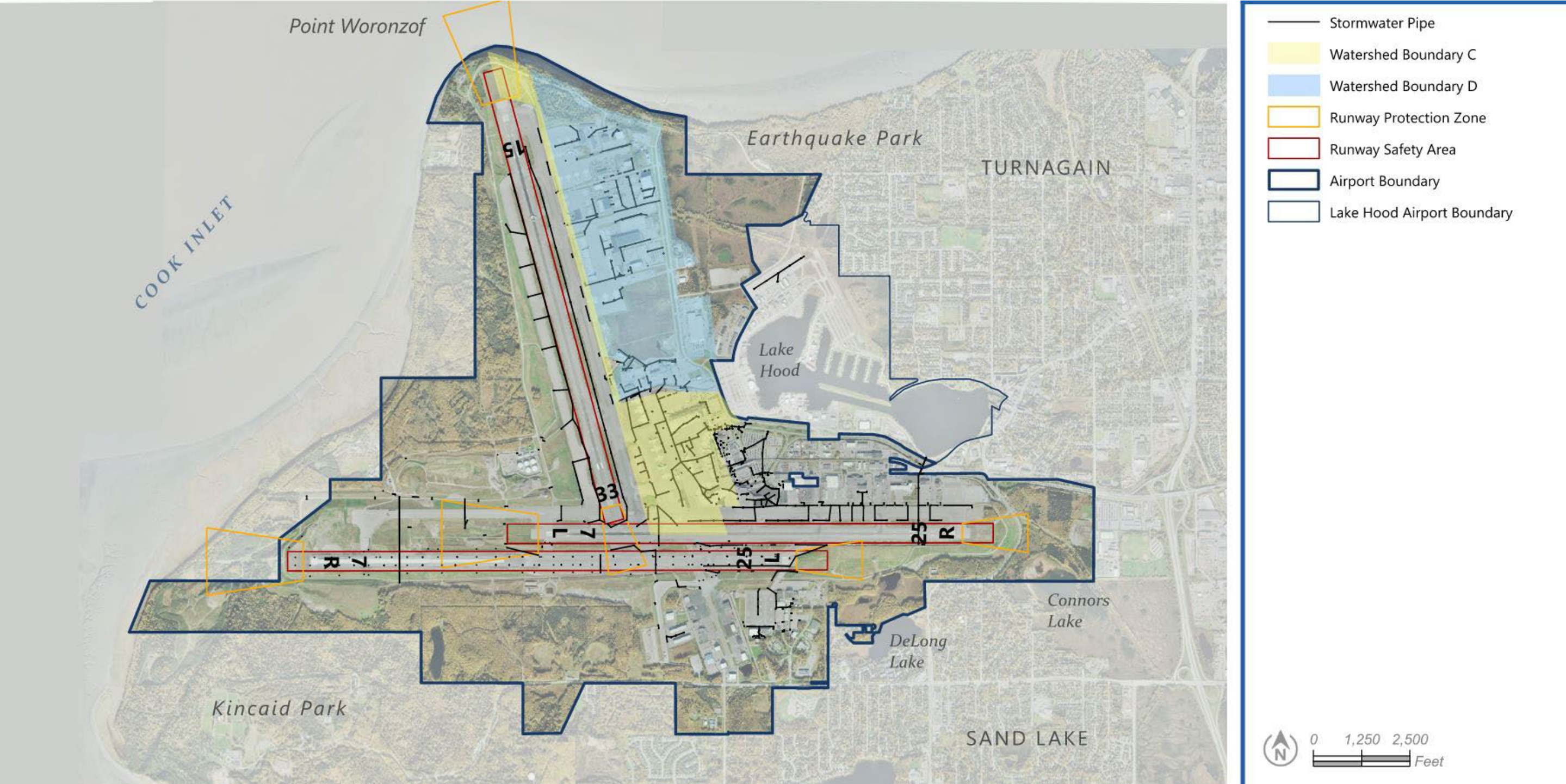
Stormwater from Drainage Area C is re-routed by gravity back-up from two corrugated metal pipes at Aircraft Drive to Drainage Area D using an irrigation gate. The gate is anticipated to remain in place for the foreseeable future⁴⁵.

⁴³ Amendment to 2004 Water Body Recovery Plan, 2011.

⁴⁴ Limno-Tech Inc. Deicing Management Program Plan, 2004.

⁴⁵ Ibid.

Figure 2-40
Stormwater Drainage System



Public Water and Sewer Services

AWWU provides public water and sewer service to the Airport. The main water lines (16-inch pipe) are located along Old International Airport Road and Northern Lights Boulevard. These two water lines supply water to the passenger terminals and North Airpark area and are connected by another water line along Postmark Drive. Another main water line includes a 12-inch pipe that enters the Airport near the Lake Hood gravel strip along Aircraft Drive. This line connects back to the 16-inch pipe previously mentioned. Finally, a 30-inch pipe water line on the south side of the Airport provides water along Raspberry Road to the Kulis Business Park and the South Airpark. There are a number of smaller water lines branching off the main water lines.

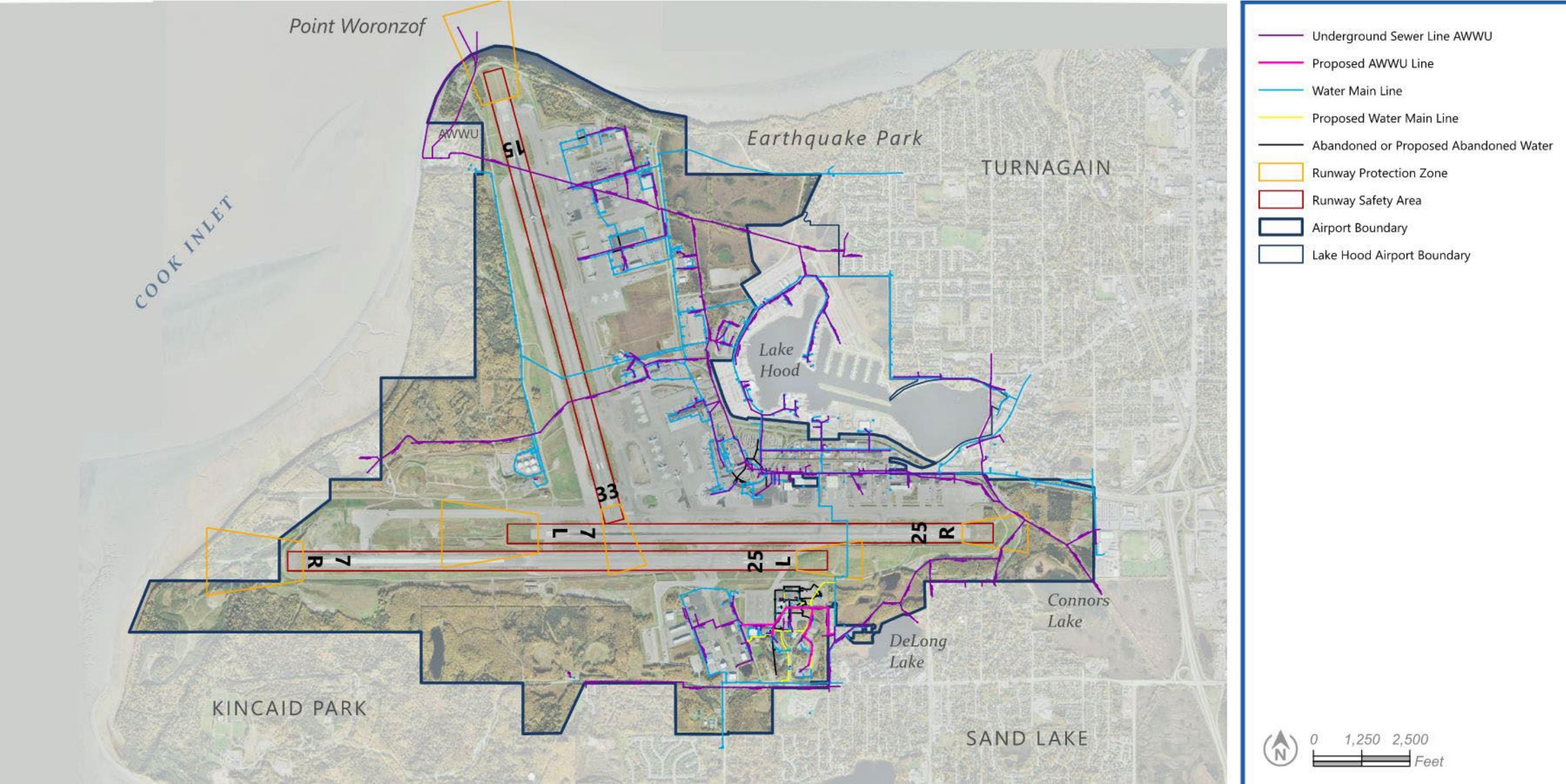
AWWU has its Asplund Wastewater Treatment Facility located off Airport property and west of Runway 15-33. Sewer lines run from various Airport areas into the main 96-inch sewer line heading to the Asplund Wastewater Treatment Facility. Following primary treatment of wastewater, the water is discharged to the Cook Inlet and other marine waters. In the future, a secondary treatment facility may be added pending USEPA review of the facility's current discharge permit. A 75-acre land area south of the treatment facility is currently reserved for future AWWU wastewater treatment facility expansions.

In the future, should the South Airpark expand westward, sewer lines will need to be extended. Likewise, if the West Airpark is developed, water lines will need to be extended to the West Airpark from Point Woronzof Drive and Kincaid Road. Also, concerns have been raised regarding sewer and water lines under the FedEx taxiway and apron area. Since the pavement areas under the taxiway have been reinforced to accommodate the weight of aircraft, AWWU maintenance employees find it difficult to access and costly to maintain the underground sewer and water lines. Generally, there are concerns that the connections between public and private water and wastewater lines have been piecemealed and should be addressed in future AWWU master plans and infrastructure realignment plans.

South of the Airport, AWWU owns the Kincaid Reservoir. Constructed in 1993, this reservoir provides water storage and is important for Airport firefighting functions.

The existing water and sewer line systems are shown on **Figure 2-41**. The 2005 AWWU Anchorage Water Master Plan and the 2006 AWWU Anchorage Wastewater Master Plan provide greater detail about the AWWU wastewater treatment facility.

Figure 2-41
Water and Sanitary Sewer Systems



Solid Waste and Recycling Services

Solid waste and recycling services are provided by Alaska Waste and the MOA Solid Waste Services. A review of the solid waste recycling at ANC is described in **Appendix B – Review of Solid Waste Recycling**.

Telecommunication Services

The telephone service is provided by Alaska Communications Systems. Alaska Communications Systems leases a 0.04-acre site immediately south of the NOAA facility along Sand Lake Road. The facilities at this location consist only of equipment shelters. Within the West Anchorage Planning Area, service is widely available except near Kincaid Park. Cellular tower heights are regulated by the Anchorage Municipal Code (AMC) 21.45.265.

2.8 Financial Overview

This section provides an overview of the financial management practices of the Airport. The following sections present the Airport's financial history and the management structure under which it operates. In addition, this section describes the Capital Improvement Plan (CIP) funding process.

2.8.1 Airport Ownership and Operation

The Airport and Fairbanks International Airport are owned by the State of Alaska and are together operated by the State of Alaska Department of Transportation and Public Facilities as an enterprise fund. The Alaska International Airport System (AIAS) was established by Chapter 88 of the Session Laws of Alaska in 1961.

The AIAS is currently Alaska's largest enterprise fund and prepares its financial statements in accordance with generally accepted accounting principles applicable to State and local government entities. Because the accounting and financial reporting treatment applied to a fund is determined by its measurement focus, AIAS accounts are reported using the flow of economic resources measurement focus, which distinguishes operating activities from non-operating items.

AIAS produces independently audited stand-alone financial statements each year to meet several requirements, including its obligations to bondholders through its debt covenants and in conformance with its AIAS Passenger Terminal Lease and Operating Agreement obligations to its signatory airline customers.

AIAS financial statements are also included in the proprietary fund section of the Alaska's comprehensive annual financial report, and its accounts are also subject to annual single audit in conformity with the Single Audit Act of 1984 and the U.S. Office of Management and Budget's Circular A-133 requirements.

In addition to the State of Alaska oversight, AIAS also operates under the regulations of the FAA. Key provisions of the FAA's financial regulations include the requirements that AIAS be as economically self-sustaining as possible, enterprise fund revenues must not be transferred outside the AIAS, and Airport Improvement Program (AIP) and Passenger Facility Charges (PFC) funds are limited to eligible projects only.

2.8.2 Alaska International Airports System Financial Structure

As a sponsor that accepts FAA grants or receives federal property for Airport purposes, the AIAS must conform with the financial management and operating regulations of the FAA Airport Compliance Program. FAA Order 5190.6B, FAA Airport Compliance Manual, details these rules

and regulations. In addition, the Airport complies with State of Alaska regulations and prepares its financial statements in accordance with accounting principles generally accepted in the United States of America.

The AIAS is managed as a financially self-sustaining unit with revenues equal to or exceeding expenses over the long term. Within the parameters of its regulations and its approved State operating and capital budgets, the AIAS has the authority to set rental rates and charges for its tenants and users, as well as to control its own expenses. AIAS rates and fees are influenced by its debt service coverage ratio covenant, which by law must be met each year (1.25 times annual debt service). Additionally, the AIAS is authorized under its budgets to enter into long-term contracts and through its statutes to borrow funds to finance capital projects.

Outside of FAA-administered programs that provide significant capital project support (i.e., AIP and PFC) and occasional Transportation Security Administration (TSA)-funded security projects, AIAS does not receive support from federal, State, or local tax revenues. It generally operates in a self-sufficient manner, producing sufficient revenues to cover operating and portions of its capital expenses. The FAA restricts the use of airport revenues to AIAS purposes only. Therefore, the AIAS may not use such funds for non-airport purposes as defined by the FAA.

In addition, the FAA also requires that AIAS aeronautical rates and charges be “reasonable.” This reasonableness test generally requires that the rates and charges be based on a methodology that is reasonably reflective of the Airport’s operating cost and that there is not an excessive accumulation of excess revenues over expenses or the Airport’s airline customers agree to the imposition of such rates and charges.

FAA rules permit airports owned by the same entity to combine financially into one accounting unit. The Airport and Fairbanks International Airport operate as a combined enterprise fund financially, and as somewhat an integral operating unit with respect to matters involving system planning, service levels, rates and fees, and airline diversion support. This means that neither airport has to be financially self-sufficient by itself. Consequently, the combined two-airport organization has a goal of self-sufficiency and can interact with respect to revenues and expense budgeting and capital funding requirements.

2.8.3 Historical Operating Revenue and Expenses

This section presents the operating revenues and expenses of the AIAS over the past five years. Additionally, the historical cash flow (or, as defined in the Annual Audit report, “Changes in Net Assets”) is discussed.

The AIAS FY runs from the calendar days of July 1 through June 30. The AIAS operating revenue ranged between \$122 million to \$147.9 million within the 2018-2021 timeframe. The following detail the largest sources of operating revenue based on FY 2021 operating results.

- **Landing Fees** - The AIAS derives the single largest source of operating revenue from the collection of landing fees. These fees are paid by airlines to use the airfield, based upon the maximum weight of the aircraft. This results in heavier aircraft paying more than lighter aircraft.
- **Fuel Flowage Fees** - The second largest source of revenue is the fuel flowage fee, derived from an amount added to each gallon of fuel pumped into an aircraft. As the Airport is a frequent trans-Pacific refueling location for large aircraft, the Airport has higher fuel flowage than other facilities.
- **Terminal Rents** - The third largest source of revenue comes from rent paid by airlines and other tenants who lease passenger terminal space or Airport land.
- **Concessions** - The Airport charges concessionaires such as food / beverage, news / gifts, and duty-free businesses, a percentage of their total receipts. These charges represent the fourth largest source of Airport revenue.
- **Vehicle Parking** - Fees charged for using the automobile parking lots represent the fifth largest revenue source.
- **Aircraft Parking** - Aircraft parking fees are charged to air carriers who park aircraft on airfield aprons.
- **Other** - Miscellaneous charges and various fees and rents represent "other" Airport revenue.

Table 2-25 describes five years of operating revenues by source.

The AIAS operating expenses ranged between \$82.1 million and \$97.9 million within the 2018-2021 timeframe. Management identifies and categorizes expenses for the AIAS based upon operational functions. Although not shown separately, personnel expenses such as salaries, wages, and employee benefits constitute the majority of operating costs. Other operating costs such as supplies, materials, insurance, and contractor costs represent a smaller component of operating costs.

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Table 2-25

AIAS Historical Operating Revenue (in \$)

Source	2021	2020	2019	2018	2018
Landing Fees	\$53,123,507	\$61,927,355	\$62,963,705	\$74,884,735	\$70,584,392
Fuel Flowage Fees	\$24,236,026	\$20,968,254	\$19,644,311	\$19,968,511	\$18,971,511
Terminal Rents	\$21,505,165	\$25,451,016	\$24,423,866	\$23,194,246	\$21,405,811
Concessions	\$9,527,117	\$13,816,529	\$16,255,762	\$14,873,152	\$14,455,991
Vehicle Parking	\$5,994,351	\$7,503,258	\$9,303,109	\$9,233,610	\$9,082,460
Aircraft Parking	\$6,979,460	\$4,057,027	\$3,884,350	\$3,887,661	\$3,627,070
Airline Bad Debt	\$(505,725)	\$(477,324)	\$-	\$(2,339,726)	\$-
Other	\$1,117,644	\$3,457,913	\$4,789,297	\$4,190,570	\$4,698,584
Total	\$121,977,545	\$136,704,028	\$141,264,400	\$147,892,759	\$142,825,819

Source: Alaska International Airport System Audited Financial Statements (various)

Table 2-26 describes five years of operating expenses by functional category.

Table 2-26

AIAS Historical Operating Expenses

Source	2021	2020	2019	2018	2017
Facilities	\$28,414,941	\$28,655,868	\$25,228,193	\$27,799,706	\$31,036,664
Maintenance	\$21,826,233	\$19,781,713	\$20,401,289	\$18,957,522	\$23,395,744
Safety	\$14,970,989	\$12,356,818	\$12,988,981	\$15,276,551	\$18,971,221
Administration	\$11,515,395	\$13,552,364	\$13,504,714	\$12,591,512	\$15,047,721
Operations	\$6,073,214	\$4,773,867	\$4,271,218	\$4,772,468	\$4,535,541
Environmental	\$1,328,277	\$2,316,094	\$2,084,964	\$2,464,565	\$420,411
Other	\$2,737,668	\$3,578,498	\$3,579,584	\$3,296,241	\$4,525,967
Total	\$86,866,717	\$85,015,222	\$82,058,943	\$85,158,565	\$97,933,269

Source: Alaska International Airport System Audited Financial Statements (various)

Comparing Operating Revenue against Operating Expense demonstrates the AIAS generated positive cash result over the past five fiscal years. Accounting for Depreciation (a non-cash expense), Non-operating Expenses and Revenues, Capital Contributions in the form of FAA grants, Transfers In from Other Funds, and one-time Gain on Conversion describes the historical record of Change in Net Assets. As a note, the collection of Passenger Facility Charges (PFC), a fee charged on each enplaned commercial passenger at the Airport, derives additional receipts.

PFCs serve the purpose of funding pre-approved capital projects. **Table 2-27** presents the last five years' Changes in Net Assets.

Table 2-27
Changes in Net Assets

Category	2021	2020	2019	2018	2018
Operating Revenue	\$104,042,517	\$112,434,212	\$125,142,270	\$128,475,126	\$135,020,999
Operating Expense	\$73,291,134	\$129,137,223	\$126,428,424	\$120,896,352	\$122,630,909
Operating Income	\$30,751,383	-\$16,703,011	-\$1,286,154	\$7,578,774	\$12,400,909
Depreciation	\$61,281,637	\$62,943,709	\$61,305,881	\$58,791,465	\$59,166,776
Non-Operating Revenue	\$67,156,285	\$28,727,131	\$37,451,178	\$65,992,465	\$36,099,724
Non-Operating Expense					
Capital Contribution	\$59,621,484	\$36,233,364	\$39,105,404	\$68,280,915	\$43,839,473
Transfers In					
Gain on Conversion					
Change in Net Assets	\$36,626,031	\$12,024,120	\$36,165,024	\$73,571,239	\$48,499,814

Source: Alaska International Airport System

2.8.4 Sources of Operating Revenue

FAA policy requires that airports be as financially self-sufficient as possible. The AIAS maintains financial self-sufficiency by adjusting its user rates and charges to cover all costs of operating and developing the airports.

The primary source of revenue comes from passenger and all-cargo airlines that use the facilities of the AIAS. Rates and charges are adjusted as necessary to match the level of aviation traffic and anticipated AIAS costs. **Table 2-28** shows examples of the various user charges effective July 1, 2023. These charges are subject to change at any time. Additionally, various charges may also apply.

Table 2-28
AIAS Rates and Charge Amounts

Type of Charge	Unit of Measurement	Amount
Long-Term Terminal Lease Rate	Per square foot per year	\$92.81
Aircraft Landing Fee (Signatory)	Per 1,000 pounds of certified max gross takeoff weight	\$1.77
Fuel Flowage Fee (Signatory)	Per gallon pumped	\$0.027
Aircraft Apron Fee	Per square foot per year	\$1.94
Federal Inspection Fee	Per passenger	\$10.50
Aircraft Parking Fee	Per narrow body aircraft (up to 4 hours)	\$81.19
Aircraft Parking Fee	Per wide body aircraft (up to 4 hours)	\$162.38
Common Use Space Fee	Per enplaned passenger	\$2.86
Passenger Loading Bridge	Per aircraft turn	\$440.56

Source: Alaska International Airport System (AIAS), Effective July 1, 2024

2.8.5 Airline Lease and Use Agreement (Airline Operating Agreement)

Airports typically sign contracts with their major users (the scheduled airlines) to formalize the business relationships needed to operate an airport and fund capital improvements. The current 10-year Operating Agreement and Passenger Terminal Lease with the AIAS' 33 signatory carriers is effective from July 1, 2023, through June 30, 2033. The current agreements are considered "residual agreements," which means any deficit in funding the Airports will be made-up by the airlines.

The AIAS is able to operate without airline operating agreements because it has the right to set user fees and charges. However, having airline operating agreements is considered good business practice.

The airline rates and charges presented in the previous section are usually determined and changed based upon the methodology identified in the airline operating agreement.

2.8.6 Sources of Capital Funds

The section below identifies and briefly describes the principal sources of capital funds.

- **FAA Entitlement Grants** – An important source of capital improvement project funding for airports are FAA entitlement grants. The federal government taxes aviation users at the national level on tickets and fuel, as well as other items. This money is returned to airports in the form of federal grants. The amount each airport receives in entitlement grants is based upon the number of passenger boardings and total landed weight of cargo aircraft. A brief summary of historical entitlement grant amounts is presented in **Table 2-29**. The grant funds can only be used on improvements that are eligible and approved by the FAA. FAA grants seldom fund the entire project cost and, therefore, local AIAS funds must contribute a portion of the cost.

Table 2-29

Annual Airport Improvement Program Entitlement Grant Fund

Fiscal Year	Cargo Entitlement Funds	Enplaned Passenger Entitlement Funds
2022	\$12,542,233	\$4,905,279
2023	\$12,715,446	\$1,590,738

Source: Federal Aviation Administration, n.d.

- **FAA Discretionary Grants** – Additional grant funds may be available for specific projects determined by the FAA to be a high priority. Typically, the FAA offers discretionary grants for major airfield (runway and taxiway) projects. The AIAS receives FAA Airport Improvement Program discretionary grants in most years.
- **FAA Specialty Discretionary Grants** – Certain other types of FAA discretionary grants are occasionally available, such as those that fund unique noise mitigation and air pollution reduction initiatives.
- **Other Federal Grants** – Other types of federal grants (e.g., highway, environmental, economic stimulus, TSA security, etc.) for airports are occasionally available but are rare. For example, during the recent recession, numerous job-creation economic stimulus grants were awarded to airports nationwide.
- **State or Economic Development Grants** – Individual states occasionally fund specific airport projects. States typically award such grants to stimulate jobs, help depressed areas, or for other specific purposes. The applicability of these types of grants to the AIAS varies according to unique circumstances of each potential project.
- **Passenger Facility Charges** – The FAA permits airports to charge up to \$4.50 per enplaned passenger to fund specific, preapproved capital projects. The currently approved FAA applications authorize the AIAS to collect a PFC (\$3.00 per enplanement at the Airport and \$4.50 per enplanement at Fairbanks International Airport), from which AIAS obtains approximately \$4.3 million at the Airport and \$1.2 million at Fairbanks International Airport annually. The AIAS applies its annual Airport PFC collections to offset existing debt service associated with previous Airport terminal improvement projects and currently plans to use at least the current level of receipts through approximately 2026. If the level of annual PFC revenue receipts were to increase substantially due to increased FAA collection rates or significant growth in passenger enplanements, AIAS will review use of the increased amounts as they occur.
- **Customer Facility Charges** – A private developer constructed a consolidated rental car facility on Airport property, which opened in 2007. The Alaska Industrial Development and Export Authority issued conduit financing bonds to fund the construction of the facility, and customer facility charges (CFCs) are imposed on rental car customers by the car rental agencies. The CFC collected are not Airport funds but are deposited into funds overseen by an independent bond trustee for payment of operating and capital expenses. While the State of Alaska reviews the proposed CFC rates imposed on rental car customers, the conduit bonds sold to finance the facility are not obligations of AIAS or the State of Alaska.
- **Airport Operating Revenue** – Almost all types of grants and fees require a local match or contribution. Furthermore, projects that do not qualify for federal funding must be paid in full

with Airport funds. Thus, operating revenue generated by Airport users and tenants becomes a vital funding element for virtually all capital projects.

- **Private or Tenant Funds** – Airport users and tenants often fund their own capital improvements in whole or part. Examples include airline office upgrades, concession equipment, and aircraft hangars.
- **Airport Revenue Bonds** – The AIAS also borrows funds to make capital improvements by issuing General Airport Revenue Bonds (GARBs). While borrowing is often cited as a source of capital funding, in reality, the borrowing is repaid chiefly by Airport operating revenue, PFCs, and CFCs described above. The AIAS capital borrowing program is generally similar to the plan of capital borrowing at other major airports. The predominance of funds borrowed to date has been needed to fund large and non-recurring capital projects, primarily passenger terminal renovations. The subsequent debt service (principal and interest payments) is paid using a combination of Airport revenues, PFCs, and CFCs.

The FAA maintains a database of financial information on U.S. commercial service airports through its Compliance Activity Tracking System (CATS). This summary financial information is self-reported by the airports in predetermined categories and accessible to the public. CATS data for Calendar Year 2021 for the 35 medium hub airports and the Airport are compared in the following **Table 2-30**.

Table 2-30
Generalized Long-Term Debt Comparison (in Millions)

Generalized Long-Term Debt Comparison	2021
Long-Term Debt (typically Bonds)	
Average for 35 Medium Hub Airports	\$446.7
Ted Stevens Anchorage International Airport	\$324.4
Annual Debt Service (principal and interest)	
Average for 35 Medium Hub Airports	\$36.3
Ted Stevens Anchorage International Airport	\$28.3

Source: Federal Aviation Administration, *Compliance Activity Tracking System (CATS)* website, <http://cats.airports.faa.gov/>. n.d.

The Airport's debt situation is in good standing with debt values lower than average compared to peer Medium Hub Airports. The 2022 AIAS Financial Report states that the AIAS financial status reflects a stable debt profile, secured reserves, resilient activity, and a flexible capital program. A bond transaction was completed in Fiscal Year 2022 to defease and reissue debt resulting in a total debt service reduction of \$81,815,147 with a new present value savings of approximately \$77,344,203. Restructuring AIAS long-term debt and realizing \$69,979,370 in

capital contributions through federal grant programs and Passenger Facility Charges (PFCs) had a positive effect on the Airport System's net position at the end of Fiscal Year 2022.

The general conclusion relative to the ANC Airport Master Plan Update is that ANC is in a favorable financial position to implement future infrastructure projects which may increase current debt loads.

2.9 Environmental Setting

FAA Advisory Circular (AC) 150/5070-6B, Change 2, *Airport Master Plans*, provides guidance for the preparation of master plans for airports. The purpose of considering environmental factors in airport master planning is to help the airport sponsor to thoroughly evaluate airport development alternatives and to provide information that will help expedite subsequent environmental processing. The State of Alaska owns the Airport and created the Alaska International Airport System (AIAS) to operate the Airport. Future development plans at the Airport need to take into consideration environmental resources that are known to exist at, and are near, the proposed future development. Early identification of these environmental resources helps to avoid impeding development plans in the future. For a comprehensive description of the existing environmental conditions at the Airport, environmental resource categories defined in FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, Appendix A were used. **Figure 2-42** depicts Airport property and **Table 2-31** provides a summary of the environmental resource categories that were reviewed at the Airport and near the Airport. Additional environmental information can be found in **Appendix C – Environmental Overview**.

Figure 2-42
Ted Stevens Anchorage International Airport Property



Table 2-31
Summary of Environmental Resource Categories

Environmental Resource	Summary
Aviation Emissions and Air Quality	The Airport is in an area designated as being in “maintenance” for Carbon Monoxide (CO) since July 23, 2004, and in “attainment” for all other National Ambient Air Quality Standards (NAAQS) pollutants. Per 40 CFR Section 93.102(b)(4), maintenance areas with two consecutive 10-year maintenance periods are not subject to a General Conformity Determination. Therefore, the Airport is assumed to be in attainment for all NAAQS. See Section 2.9.1 for more details.
Biological Resources (including fish, wildlife, and plants)	Federal- and state-threatened and -endangered species, as well as migratory birds, have the potential to occur at the Airport. However, no critical habitat exists at the Airport. See Section 2.9.2 for more details.
Coastal Resources	The Airport is located west of the Anchorage Coastal Wildlife Refuge and south of resources identified in the Anchorage Coastal Management Plan. However, Alaska does not maintain a Coastal Zone Management Act (CZMA) Coastal Management Program. . See Section 2.9.3 for more details.
Department of Transportation Act, Section 4(f) and Land and Water Conservation Fund, Section 6(f)	Department of Transportation Act, Section 4(f) resources exist on Airport property, including six recreational areas and several historic properties listed or eligible for listing on the National Register of Historic Places (NRHP). There are no Land and Water Conservation Fund, Section 6(f) resources on Airport property.. See Section 2.9.4 for more details.
Farmlands	The Airport does not contain land designated as prime or unique farmland or farmland of statewide importance. See Section 2.9.5 for more details.
Hazardous Materials, Solid Waste, and Pollution Prevention	<i>Hazardous Materials</i> – No Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) superfund sites exist at the Airport. There are 21 active Alaska Department of Environmental Conservation Contaminated Sites on Airport property. <i>Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)</i> have been detected in the soil and groundwater at ANC, primarily in areas associated with aqueous film forming foam (AFFF) use. Management to-date includes ongoing sampling, monitoring, capping, and temporary storage of PFAS-affected soils northwest of Taxiway K. <i>Solid Waste</i> – The AIAS utilizes the Anchorage Regional Landfill. <i>Pollution Prevention</i> – The AIAS has a National Pollutant Discharge Elimination System (NPDES) permit, Stormwater Pollution Prevention Plan (SWPPP), and Spill Prevention, Control, and Countermeasure (SPCC) plan. See Section 2.9.6 for more details.
Historical, Architectural, Archaeological, and Cultural Resources	There is one (1) historic resource listed on the National Register of Historic Places (NRHP) on Airport property, the Kulis Hangar. Additionally, several Alaska Heritage Resources Survey (AHRS) sites

	are located on Airport property. These sites are eligible for listing on the NRHP, but their location is protected due to their sensitive nature. See Section 2.9.7 for more details.
Land Use	Airport property contains land designated as Airport, Railroad, or Port Facility, Other Open Space, Potential Open Space Alternative, and Water Feature. See Section 2.9.8 for more details.
Natural Resources and Energy Supply	Electricity and natural gas are supplied to the Airport by MidAmerican Energy. See Section 2.9.9 for more details.
Noise and Noise-Compatible Land Use	Portions of Point Woronzof Buffer Park, Tony Knowles Coastal Trail, and the Kincaid Park Trail Network are within the updated day-night average sound level (DNL) 75 dB noise contours. See Section 2.9.10 for more details.
Socioeconomics Children's Health and Safety Risks	<i>Socioeconomics</i> – The Airport is in the Municipality of Anchorage (MOA). The Airport is in U.S. Census Tract 23.01, Block Group 1; Census Tract 23.01, Block Group 2; Census Tract 23.02, Block Group 2; and Census Tract 24, Block Group 2. <i>Children's Health and Safety</i> – Schools or daycare facilities are located within 0.5-mile of the Airport. See Section 2.9.11 for more details.
Visual Effects	<i>Light Emissions</i> – Light emissions at the Airport occur from airfield lighting, buildings, access roads, and parking area lighting required for the safe and secure movement of people, vehicles, and aircraft. <i>Visual Resources</i> – The visual resources and visual character of the Airport currently match that of an urbanized area and an airport. See Section 2.9.12 for more details.
Water Resources	<i>Wetlands</i> – The National Wetlands Inventory and MOA have identified wetlands on Airport property. <i>Floodplains</i> – A small portion of the Airport property intersects the 100-year floodplain. <i>Surface Waters</i> – The Airport property contains several surface waters, including Meadow Lake, Delong Lake, Sullivan Pond, Little Campbell Lake, Connors Lake, and several unnamed water bodies. <i>Groundwater</i> – The Airport does not overlie a USEPA-designated Sole Source Aquifer. The Airport overlies a perched unconfined aquifer. <i>Wild and Scenic Rivers</i> – No wild or scenic rivers, or rivers within the National River Inventory, are present at or near the Airport. See Section 2.9.13 for more details.

Source: RS&H, 2023

2.9.1 Aviation Emissions and Air Quality

The U.S. Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) for specific air pollutants to protect public health and welfare through Section 109 of the Clean Air Act (CAA), which is the primary statute for air quality. The USEPA identifies the following six criteria air pollutants and has set NAAQS for each: Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO₂), 8-Hour Ozone (O₃), Particulate Matter (PM₁₀ and PM_{2.5}), and Sulfur Dioxide (SO₂).

States must identify geographic areas that do not meet the NAAQS for each criteria pollutant. Areas found to be in violation of one or more NAAQS of these pollutants are classified as “nonattainment” areas. States with nonattainment areas must develop a State Implementation Plan (SIP) that includes a variety of emission control measures that the State of Alaska deems necessary to attain the applicable NAAQS in the future within designated timeframes. Areas with previously designated nonattainment status that have since been redesignated to attainment are known as “maintenance” areas. A maintenance area must have a maintenance plan in a revision to the SIP to ensure attainment of the air quality standards. Areas where concentrations of the criteria pollutants are below (i.e., within) these threshold levels are classified as “attainment” areas. Portions of Airport property are in the part of the Municipality of Anchorage (MOA) designated a “maintenance” area for CO, and in attainment for all other NAAQS (see **Figure 2-43**).⁴⁶ However, per 40 CFR Section 93.102(b)(4), maintenance areas with two consecutive 10-year maintenance periods are not subject to a General Conformity Determination. Therefore, the Airport property is assumed to be in attainment for all NAAQS.

AIAS staff consult with the MOA and Alaska Department of Environmental Conservation (ADEC) concerning CO and other air quality issues. The Airport currently operates under an “Owner Requested Limit” permit under the State of Alaska’s air quality regulations (Alaska Statute 46.14 and 18 AAC50.225). Under this permit (Permit [AQ0089ORL09P](#), signed August 19, 2020), the AIAS submits an annual report to the ADEC to document that the Airport operates within the permit regulations and does not have any excess emissions or deviations from the permit.

⁴⁶ U.S. Environmental Protection Agency, Air Quality Green Book, Alaska. Accessed: https://www3.epa.gov/airquality/greenbook/anayo_ak.html, October 2025.

Figure 2-43
Carbon Monoxide Maintenance Area



2.9.2 Biological Resources

Biological resources include terrestrial and aquatic plant and animal species; game and non-game species; special status species; and environmentally sensitive or critical habitats. The following are federal laws, regulations, Executive Orders (EOs), and guidance that protect biotic communities:

- Endangered Species Act (ESA) (16 U.S.C. §§ 1531-1544);
- Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668 et seq.);
- Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq.);
- Fish and Wildlife Coordination Act (16 U.S.C. § 661-667d);
- Executive Order (EO) 13112, Invasive Species (64 FR 6183);
- Marine Mammal Protection Act (16 U.S.C. § 1361 et seq.);
- Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703 et seq.);
- EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds (66 FR 3853);
- Council on Environmental Quality (CEQ) Guidance on Incorporating Biodiversity Considerations into Environmental Impact Analysis under NEPA; and
- EO 13751, Safeguarding the Nation from the Impacts of Invasive Species (81 FR 88609); and
- Memorandum of Understanding to Foster the Ecosystem Approach.

There is one federally-listed and state-listed endangered species with the potential to be found on Airport property, the short-tailed albatross (*Phoebastria [=Diomedea] albatrus*).^{47,48} According to the U.S. Fish and Wildlife Service (USFWS), there is no designated critical habitat at the Airport.⁴⁹ There are 26 migratory bird species with the potential to be found on Airport property (see **Table 2-32**),⁵⁰ including the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*), which are individually protected under the Bald and Golden Eagle Protection Act (BGEPA).

⁴⁷ U.S. Fish and Wildlife Service, Information for Planning and Consultation. Accessed: <https://ipac.ecosphere.fws.gov/location/XWRYK6SFEZCKVALIP5J4X4U3Q/resources>, September 2024.

⁴⁸ Alaska Department of Fish and Game, State of Alaska Special Status Species, Endangered. Accessed: <https://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akendangered>, September 2024.

⁴⁹ U.S. Fish and Wildlife Service, Information for Planning and Consultation. Accessed: <https://ipac.ecosphere.fws.gov/location/XWRYK6SFEZCKVALIP5J4X4U3Q/resources>, September 2024.

⁵⁰ U.S. Fish and Wildlife Service, Information for Planning and Consultation. Accessed: <https://ipac.ecosphere.fws.gov/location/XWRYK6SFEZCKVALIP5J4X4U3Q/resources>, September 2024.

Table 2-32

Migratory Birds with the Potential to be Found on Airport Property

Common Name	Scientific Name
Aleutian Tern	<i>Sterna aleutica</i>
American Golden-plover	<i>Pluvialis dominica</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Black Scoter	<i>Melanitta nigra</i>
Black-legged Kittiwake	<i>Rissa tridactyla</i>
Buller's Shearwater	<i>Ardenna bulleri</i>
Common Loon	<i>Gavia immer</i>
Common Murre	<i>Uria aalge</i>
Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Golden Eagle	<i>Aquila chrysaetos</i>
Hudsonian Godwit	<i>Limosa haemastica</i>
Lesser Yellowlegs	<i>Tringa flavipes</i>
Long-tailed Duck	<i>Clangula hyemalis</i>
Olive-sided Flycatcher	<i>Contopus cooperi</i>
Pomarine Jaeger	<i>Stercorarius pomarinus</i>
Red Phalarope	<i>Phalaropus fulicarius</i>
Red-breasted Merganser	<i>Mergus serrator</i>
Red-necked Phalarope	<i>Phalaropus lobatus</i>
Red-throated Loon	<i>Gavia stellata</i>
Red-billed Gull	<i>Larus delawarensis</i>
Short-billed Dowitcher	<i>Limnodromus griseus</i>
Sooty Shearwater	<i>Ardenna grisea</i>
Surf Scoter	<i>Melanitta perspicillata</i>
Wandering Tattler	<i>Tringa incana</i>
White-winged Scoter	<i>Melanitta fusca</i>
Yellow-billed Loon	<i>Gavia adamsii</i>

Source: USFWS, 2024.

2.9.2.1 Birds

Resident and Migrant Birds

The mixed coniferous / deciduous forest on portions of the Airport provides habitat for a variety of resident and migrant songbirds. Migratory songbirds begin arriving in the Anchorage area in early May and are the most numerous bird species found in the area during the summer.

Bald Eagles and Golden Eagles

Bald eagles and golden eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA; 16 USC 668–668c) and the Migratory Bird Treaty Act (MBTA). BGEPA protects these eagles by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. For bald eagles, the USFWS generally recommends no clearing of vegetation within 330 feet of any nest. No activity should occur within 660 feet of any nests between March 1 and June 1. Between June 1 and August 31, no activity should occur within 660 feet of active eagle nests until after juvenile birds have fledged, unless specifically authorized by USFWS.⁵¹

Some activities and projects are eligible for federal permits under the BGEPA. The regulation set forth in 50 CFR § 22.26 allows permits to be issued to “take” bald and golden eagles where the taking is associated with, but not the purpose of, the activity and cannot practicably be avoided. Most takings authorized under this section are in the form of disturbance; however, permits may authorize non-purposeful takings that result in mortality (50 CFR § 22.26).

Bald eagles (*Haliaeetus leucocephalus*) are present year-round at the Airport. The Airport has a Purposeful Eagle Take for Safety/Eagle Nest Take permit that allows only bald eagles to be harassed to protect aviation safety, with restrictions on harassment methods. The permit allows for hazing, not lethal removal, and allowed for the removal of all bald eagle nests on Airport property.⁵² The AIAS actively monitors for bald eagles attempting to establish nests on Airport property. Bald eagle nests have been located along the Tony Knowles Coastal Trail (Coastal Trail); however, these are located outside of the Airport property. Two nests adjacent to the Airport produced eaglets in 2019 leading to 1 juvenile eagle that frequents the Air Operations Area (AOA). One of these nests is a re-nest attempt by a pair whose original nest was on Airport property and was removed.⁵³

Birds of Conservation Concern

Various agencies and nonprofit groups have identified several species on or near the Airport as “birds of conservation concern.” The USFWS developed the list of Birds of Conservation Concern (BCC), which provides a list of migratory and non-migratory bird species that represent the highest conservation priorities.⁵⁴ There are 88 species listed in the BCC. The Audubon Alaska WatchList Red list identifies Alaska birds that have the highest level of concern: species that are

⁵¹ U.S. Fish and Wildlife Service, National Bald Eagle Management Guidelines, n.d.

⁵² U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

⁵³ U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

⁵⁴ U.S. Fish and Wildlife Service, Birds of Conservation Concern, 2021. Accessed: <https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf>, March 2023.

currently declining or are depressed from a prior decline, and therefore warrant special conservation attention; there are 35 species listed in the Audubon's Alaska WatchList Red List.⁵⁵

2.9.2.2 Fish

Alaska blackfish likely reside in Little Campbell Lake, Meadow Lake, and DeLong Lake. These lakes are located along the southern portion of Airport property. In 2022, Alaska Department of Fish & Game (ADF&G) stocked Little Campbell Lake with Arctic Char, Chinook salmon, and rainbow trout, DeLong Lake with Chinook salmon, and rainbow trout⁵⁶. Northern pike, an invasive species, resides in DeLong Lake.

2.9.2.3 Wildlife

Some areas within Airport property provide habitat for small mammals such as red squirrel (*Tamiasciurus hudsonicus*), coyotes (*Canis latrans incolatus*), snowshoe hare (*Lepus americanus*), ermine (*Mustela spp.*), shrews (*Sorex spp.*), and other small rodents. Small numbers of black bear (*Ursus americanus*) and red fox (*Vulpes vulpes*) reside in mixed coniferous and deciduous forests consisting of paper birch (*Betula papyrifera*), white spruce (*Picea glauca*), and black spruce (*Picea mariana*) adjacent to the Airport. In association with a wide variety of forests, shrubs (willow), and wetland habitats, moose (*Alces alces*) are common year-round near the Airport. Due to a high number of incidents involving wildlife and the significant wildlife population near the Airport, the FAA adopted and approved a wildlife hazard management plan (WHMP) in 1997 and updated the WHMP in 2013 and 2022.

The AIAS actively manages certain species with population control measures that are in place: pigeons, European starlings, bald eagles, owls and diurnal raptors, waterfowl, moose, black bears, and Canada geese.⁵⁷

2.9.2.4 Wildlife Hazard Management

In 2009, the AIAS completed a Wildlife Hazard Assessment (WHA). The WHA analyzed wildlife hazards over the past 13 years and evaluated seasonal wildlife control efforts, and formalized wildlife surveys during 2007 and 2008. The WHA provided recommendations for habitat modification. A revised Wildlife Hazard Management Plan (WHMP), completed in 2022, recognizes the ongoing cooperative relationship with the U.S. Department of Agriculture-Wildlife Services (USDA-WS) program to provide daily wildlife hazard mitigation services.

⁵⁵ Warnock, N., The Alaska WatchList, 2017. Audubon Alaska. Accessed: https://ak.audubon.org/sites/default/files/2017_akwatchlist_final_panels_highres.pdf, May 2023.

⁵⁶ Alaska Department of Fish and Game, Alaska Lake Database. Accessed: http://www.adfg.alaska.gov/SF_Lakes/, May 2023.

⁵⁷ U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

Since 1996, the AIAS has contracted with the USDA-WS program for Wildlife Hazard Management. During this time, USDA-WS employed many techniques, primarily nonlethal, to reduce the threat posed by wildlife to aircraft and human health and safety. These techniques include:

- Habitat modification / management
- Exclusionary devices
- Repulsion techniques
- Removal techniques

USDA-WS patrols the Airport property continuously during the summer field season (April through October), and 40 hours per week during the winter season. Wildlife Specialists patrol the airfield, continually vigilant against aircraft-wildlife conflicts. Between November and March, when USDA-WS is not present 24 hours a day, the Airport Wildlife Coordinator (Operations Manager) performs airfield wildlife patrols.

The AIAS maintains several permits necessary to comply with federal and state laws governing wildlife control actions. The USFWS Anchorage Field Office issued a federal depredation permit under the MBTA (50 CFR, Part 21.41), which is required for the removal of birds at Alaskan airports. As required by the BGEPA (50 CFR, Part 22.23), the AIAS currently has a valid Eagle Depredation Permit that allows non-lethal harassment of eagles. Lastly, Alaska State Regulations (AS 16.05.920, AAC 92.033, and AAC 93.020) require a permit for the taking of game species at the Airport that is necessary for wildlife control operations. The AIAS currently has a Public Safety Permit from ADF&G for this purpose.

Habitat Modification / Management

Habitat modification is the alteration of habitat features (e.g., food, water, and cover) that support and attract wildlife. The removal and/or reduction of food sources are important actions taken to reduce attractants for hazardous wildlife. The AIAS is constantly working to remove attractive habitat and replace it in compliance with their WHMP.

The AIAS has undertaken several habitat modification projects to reduce wildlife attractants. Tree and shrub removal in Postmark Bog near Taxiway P was completed in 2019. A wetland was removed southeast of the end of Runway 7L, and the approach light canyon for Runway 7L is planned to be filled in when FAA-owned equipment needs to be replaced. Currently this area is an attractive habitat and is difficult to manage because the location is isolated from the rest of the Airport. Additionally, the AIAS makes anti-perching devices for birds available to operators of any structures on Airport property.⁵⁸ Standing water is also a habitat attractant and area on

⁵⁸ U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

the AOA with standing water are being identified by location, function, and whether there are conflicting regulations regarding modification of the area to reduce standing water.⁵⁹

The Airport's most significant wildlife attractant is in the area west of Runway 7L. During the winter, Airport Field Maintenance uses that area as a snow disposal site which creates mounds of snow. Eagles and ravens use the snow mounds as a perch to look for prey. Airport Field Maintenance staff attempt to flatten the snow piles in that area, so those birds don't use it as a perch, but that coordination is ongoing. The approach light canyon west of the Runway 7L end has an estimated ground elevation drop of 40 feet. The Airport biologist indicated that many animals congregate in that area to feed on the vegetation, which also draws predators. The area is planned to be filled in when FAA-owned equipment needs to be replaced.⁶⁰

There are several areas of Airport property that have been identified as viable habitats or attractants to wildlife that need active management, including:

- Lake Hood Seaplane Base
- Gull Island
- Lake Hood Strip
- Open Grass Areas on the AOA
- Drainage Ditches
- Gravel surfaces on the AOA
- Snow Dumps
- Construction Activities⁶¹

The AIAS also identified managing food sources and prey as an area to keep wildlife attractants to a minimum. Minimizing grasshoppers or insect populations, securing dumpsters or trash cans, prohibiting feeding wildlife at Lake Hood, removing muskrats, removing carcasses, and managing duck populations are ways to reduce food and prey sources at the Airport.⁶²

Exclusionary Devices

Examples of exclusionary devices include the continuous eight-foot security fence that surrounds the AOA and grating over culverts, both of which limit wildlife access to the Airport property. Other permanent devices that are effective include grid wires, floating plastic balls, floating covers, and other physical barriers.

⁵⁹ U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

⁶⁰ Communication with Airport Biologist, May 2023.

⁶¹ U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

⁶² U.S. Department of Agriculture (2022), Animal and Plant Health Inspection Service. Wildlife Hazard Management Plan, Ted Stevens Anchorage International Airport.

Several areas of bog habitat on Airport property have fences installed with one-way moose gates to direct moose into enclosures that prevent them from being a hazard to aircraft. Smaller mammals regularly gain access into the Airport by climbing over the fence, through small openings under the fence, and at gates. Sections of the fence that need to be replaced or repaired in the future may include consideration of addition of a buried skirt to prevent wildlife intrusion.

Repulsion Techniques

Repulsion techniques are those that scare away wildlife. Such techniques include visual, physical, and vehicle harassment; pyrotechnics, mylar tape, paintball guns, propane cannons, bear spray, rubber bullets and other non-lethal rounds, remote control boats, effigies, physical harassment, harassment shooting, horns, vehicles, and unmanned aircraft systems (UAS). USDA-WS recently started using highly trained dogs to search out and harass bird nest sites. Wildlife harassment is the most active and direct component of the WHMP at the Airport. Postmark Bog is actively hazed throughout the open water season to disperse the larger-bodied birds such as geese, ducks, and cranes. Moose are also hazed from Postmark Bog area and portions of Turnagain Bog near Lake Hood.

Removal Techniques

Removal techniques used at the Airport include both non-lethal and lethal methods. Most of the non-lethal techniques employed remove the offending animal(s) or prevent nesting or habituation. Non-lethal techniques primarily consist of live capture and relocation. Lethal techniques include firearm use, nest/egg destruction or removal, falconry, and lethal trapping. The AIAS uses lethal techniques as a last resort and only as reinforcement for other non-lethal harassment techniques, or in emergencies.

2.9.3 Coastal Resources

The primary statutes, regulations, and EOs that protect coastal resources include:

- Coastal Barrier Resources Act (16 U.S.C. § 3501 et seq.);
- Coastal Zone Management Act (CZMA) (16 U.S.C. § 1451-1466);
- National Marine Sanctuaries Act (16 U.S.C. §1431 et seq.);
- EO 13089, *Coral Reef Protection* (63 FR 32701); and
- EO 13547, *Stewardship of the Ocean, Our Coasts, and the Great Lakes* (75 FR 43021-43027).

The Federal Coastal Zone Management Act (CZMA) of 1972 authorizes each state to review federal activities and federally permitted activities within or affecting the coastal zone. Between 1979 and 2011, coastal districts in Alaska operated under the Alaska Coastal Management Program. However, the program and its authorities expired under a sunset clause on June 30, 2011. As of July 1, 2011, the related regulations and the local coastal management plans are without statutory authority and therefore unenforceable. In early 2012, the State House

introduced a bill to re-establish a coastal management program in Alaska, but the measure failed. Subsequently, voters also rejected the measure in a ballot vote in August 2012. According to the National Oceanic and Atmospheric Administration, the State of Alaska still does not have a Coastal Zone Management Plan.⁶³

The MOA prepared an Anchorage Coastal Management Plan (ACMP) in 1979 and updated it in 2007. The MOA cannot effectively implement the ACMP without the State of Alaska's coastal management program to monitor the implementation of local district plans. Without the State of Alaska's coastal management program in effect, the policies listed in the ACMP are not enforceable. While the ACMP is no longer enforceable, the plan listed the bluffs along Point Woronzof, which are about 1,250 feet northwest of the end of Runway 15, as an important physical feature that should be preserved.

The Federal Coastal Barriers Resources Act of 1982, as amended, addresses undeveloped coastal barriers along the coasts of the Atlantic Ocean and the Gulf of Mexico. As defined by the Act, there are no coastal barriers in Alaska; therefore, the Act does not apply to the Airport. The closest Coastal Barrier Resource System Unit is Minnesota Point MN-01, about 2,450 miles southeast of the Airport.⁶⁴ The closest National Marine Sanctuary is the Olympic Coast, located approximately 1,350 miles southeast of the Airport.⁶⁵

The Anchorage Coastal Wildlife Refuge, managed by the Alaska Department of Fish and Game,⁶⁶ is located along the coast west of the Airport (see **Figures 2-18**). The refuge is approximately 32,000 acres and extends 16 miles from Point Woronzof south to Potter Creek.

2.9.3.1 Coastal Erosion

Coastal erosion is a serious problem facing Alaska. Near the Airport, coastal erosion has been a long-time problem, particularly at Point Woronzof. The ongoing erosion of Point Woronzof is a serious concern because of the potential impact on the Runway 33 runway safety area (RSA), the primary departure runway. A reduction in runway length due to resolving the RSA may affect the Airport's ability to accommodate the Asia-North America air cargo traffic.

⁶³ National Oceanic and Atmospheric Administration, Office for Coastal Management, Coastal Zone Management Programs, Alaska. Accessed: <https://coast.noaa.gov/czm/mystate/>, March 2023.

⁶⁴ U.S. Fish and Wildlife Service, Coastal Barrier Resources System Mapper. Accessed: <https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/>, March 2023.

⁶⁵ National Oceanic and Atmospheric Administration, National Marine Sanctuaries, Maps. Accessed: <https://sanctuaries.noaa.gov/about/maps.html>, March 2023.

⁶⁶ Alaska Department of Fish and Game, Anchorage Coastal Wildlife Refuge Map. Accessed: https://www.adfg.alaska.gov/static/lands/protectedareas/_land_status_maps/anchoragecoastalwildliferefugels.pdf. September 2024.

The University of Alaska Anchorage (UAA) prepared a study in 2008 that assessed the coastal erosion at Point Woronzof. The study indicated a variety of possible causes for the erosion and suggested a possible solution of a revetment at the base of the cliff to help stabilize the slope and halt the erosion.

In late 2012, the AIAS requested assistance from the U.S. Army Corps of Engineers (USACE) under Section 103 of the 1962 River and Harbor Act, as amended, to help reduce the threat of erosion and storm damage at Point Woronzof. In 2023, the AIAS and MOA contacted the USACE to discuss cooperatively investigating the erosion and discuss potential mitigation steps. This study would require Federal funding and does not currently have any funding. If funding is received, the study would be completed within three years.⁶⁷ FAA grant assurances preclude the Airport from funding the project for recreational purposes should a desire arise to stabilize the bluff to prevent erosion.

The MOA and community members remain concerned with the coastal erosion at Point Woronzof because it threatens two other community assets: the Tony Knowles Coastal Trail and Point Woronzof Drive. The Tony Knowles Coastal Trail is adjacent to the bluff and Point Woronzof Drive is between the bluff and the runway. In the 1990s, a section of the Coastal Trail was relocated due to erosion. Point Woronzof Drive is the only roadway access the MOA has to a Chugach Electric Association substation, the Asplund Wastewater Treatment Facility, and other developable land west of the Airport.

2.9.4 Department of Transportation Act, Section 4(f) and Land and Water Conservation Fund, Section 6(f)

Relevant federal laws, regulations, and EOs that protect Section 4(f) resources include:

- U.S. Department of Transportation (USDOT) Act, Section 4(f) (49 U.S.C. § 303.);
- Land and Water Conservation Fund Act of 1965 (16 U.S.C. §§ 4601-4604 et seq.);
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) – Section 6009 (49 U.S.C. § 303.); and
- U.S. Department of Defense Reauthorization (Public Law (P.L.) 105-185, Division A, Title X, Section 1079, November 18, 1997, 111 Stat. 1916).

The USDOT Act, Section 4(f) (Section 4(f)) provides that no project that requires the use of any land from a public park or recreational area, wildlife and waterfowl refuge, or historic site be approved by the Secretary of Transportation unless there is no feasible and prudent alternative and provisions to minimize any possible harm are included in the planning. Similarly, the Land and Water Conservation Fund (LWCF) Act prevents the conversion of lands purchased or developed with LWCF funds to non-recreation uses, unless the Secretary of the Interior, through

⁶⁷ Letter from the Airport and MOA to USACE, April 21, 2023.

the National Park Service, approves the conversion. Conversion may only be approved if it is consistent with the comprehensive statewide outdoor recreation plan when the approval occurs. Additionally, the converted property must be replaced with other recreation property of reasonably equivalent usefulness and location, and at least equal fair market value.

There are several Section 4(f) recreational resources on Airport property, including Kincaid Park, Delong Lake Park, Connors Lake Park, Point Woronzof Overlook, Tony Knowles Coastal Trail, and the Kincaid Park Trail network (see **Figure 2-44**).⁶⁸ Spenard Park is within the Lake Hood Airport property boundary. According to the U.S. National Park Service (NPS), one building on Airport property, the Kulis Hangar, is listed on the National Register of Historic Places (NRHP) (see **Figure 2-44**).⁶⁹ In addition, there are several Alaska Heritage Resources Survey (AHRS) sites on Airport property that are eligible for historic designation; however, the location of these sites is protected due to their sensitive nature⁷⁰ (refer to **Section 2.9.8**).

Section 4(f) recreational properties adjacent to the Airport property include Earthquake Park and Point Woronzof Park to the north and west, respectively (see **Figure 2-18**). The closest National Wildlife Refuge (NWR) is Kenai NWR, located about 10 miles south of the Airport.⁷¹ The closest state wildlife refuge is the Anchorage Coastal Wildlife Refuge, located along the coast west of the Airport (see **Figure 2-18**).⁷² The closest state park is Chugach State Park, about eight miles east of the Airport.⁷³

There are no Section 6(f) LWCF sites on Airport property. The closest Section 6(f) LWCF site to the Airport is Central Spenard, about 2,000 feet east of the Airport.⁷⁴

2.9.5 Farmlands

The following statutes, regulations, and guidance pertain to farmlands:

- Farmland Protection Policy Act (FPPA) (7 U.S.C. §§ 4201-4209);
- CEQ Memorandum on the Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act (45 FR 59189); and

⁶⁸ Municipality of Anchorage, Anchorage Parks and Recreation. Accessed:

<https://muniorg.maps.arcgis.com/apps/webappviewer/index.html?id=ae59698bf01349f6a6a2d0ad3b15a03c>, February 2023

⁶⁹ National Park Service, National Register of Historic Places. Accessed: <https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>, September 2024.

⁷⁰ Alaska Heritage Resources Survey, May 2023.

⁷¹ U.S. Fish and Wildlife Service, Visit the National Wildlife Refuge System, Find a Refuge Near You. Accessed:

https://www.fws.gov/visit-us/refuges?type=%5B%22National%20Wildlife%20Refuge%22%5D&state_name=%5B%22Alaska%22%5D, March 2023.

⁷² Alaska Department of Fish and Game, Anchorage Coastal Wildlife Refuge Map. Accessed:

https://www.adfg.alaska.gov/static/lands/protectedareas/_land_status_maps/anchoragecoastalwildliferefugels.pdf. September 2024.

⁷³ Alaska Department of Natural Resources, Division of Parks & Outdoor Recreation, Explore. Accessed: <https://dnr.alaska.gov/parks/>, March 2023.

⁷⁴ Land and Water Conservation Fund, Past Projects. Accessed: <https://lwcf.tplgis.org/mappast/>, March 2023.

- State and local regulations.

The FPPA of 1981 regulates federal actions that have the potential to convert farmland to non-agricultural uses. The FAA requires consideration of "important farmlands," which it defines to include "all pasturelands, croplands, and forests (even if zoned for development) considered to be prime, unique, or of statewide or local importance."⁷⁵ According to Section 523.10(B) of the FPPA, lands identified as urbanized areas by the U.S. Census Bureau are not subject to the provisions of the FPPA.

According to the Natural Resources Conservation Service (NRCS), the Airport property does not contain prime or unique farmland or farmland of statewide importance.⁷⁶

⁷⁵ Federal Aviation Administration, Order 1050.1 Desk Reference, Chapter 6 *Farmlands*. Accessed: https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faa_nepa_order/desk_ref, January 2023.

⁷⁶ Natural Resources Conservation Service, Web Soil Survey. Accessed: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, March 2023.

Figure 2-44
Department of Transportation, Section 4(f) Properties



2.9.6 Hazardous Materials, Solid Waste, and Pollution Prevention

Federal laws, regulations, and EOs that relate to hazardous materials, solid waste, and pollution prevention include:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §§ 9601-9765);
- Emergency Planning and Community Right to Know Act (42 U.S.C. §§ 11001-11050);
- Federal Facilities Compliance Act (42 U.S.C. § 6961);
- Hazardous Materials Transportation Act (49 U.S.C. §§ 5101-5128);
- Oil Pollution Act of 1990 (33 U.S.C. §§ 2701-2762);
- Pollution Prevention Act (42 U.S.C. §§ 13101-13109);
- Toxic Substances Control Act (TSCA) (15 U.S.C. §§ 2601-2697);
- Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §§ 6901-6992k);
- EO 12088, *Federal Compliance with Pollution Control Standards* (43 FR 47707);
- EO 12580, *Superfund Implementation* (52 FR 2923), (63 CFR 45871), and (68 CFR 37691); and
- EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (72 FR 3919); and
- EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (74 FR 52117).

2.9.6.1 Hazardous Materials

In a regulatory context, the terms “hazardous wastes,” “hazardous substances,” and “hazardous materials” have precise and technical meanings:

Hazardous Wastes. Subpart C of the RCRA defines hazardous wastes (sometimes called characteristic wastes) as solid wastes that are ignitable, corrosive, reactive, or toxic. Examples include waste oil, mercury, lead, or battery acid. In addition, Subpart D of the RCRA contains a list of specific types of solid wastes that the USEPA has deemed hazardous (sometimes called listed wastes). Examples include, degreasing solvents, petroleum refining waste, or pharmaceutical waste.

Hazardous Substances. Section 101(14) of the CERCLA defines hazardous substances broadly and includes hazardous wastes, hazardous air pollutants, or hazardous substances designated as such under the Clean Water Act and TSCA and elements, compounds, mixtures, solutions, or substances listed in 40 CFR Part 302 that pose substantial harm to human health or environmental resources. Pursuant to the CERCLA, hazardous substances do not include any petroleum or natural gas substances and materials. Examples include ammonia, bromine, chlorine, per- and polyfluoroalkyl substances (PFAS), aqueous firefighting foam, or sodium cyanide.

Five surveys at ANC identified per- and polyfluoroalkyl substances (PFAS), particularly perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), in soil and groundwater:

- 2020 ANC Postmark Bog PFAS Site Investigation:⁷⁷ PFAS compounds (PFOS and PFOA) were detected in all 43 shallow soil samples. Most exceeded ADEC Migration to Groundwater (MTG) cleanup levels for PFOS and/or PFOA, but did not exceed ADEC Human Health Direct Contact cleanup level of 1.6 mg/kg for either compound. PFOS concentrations ranged from 0.0018 to 1.06 mg/kg. PFOA concentrations ranged from 0.0011 to 0.0333 mg/kg.
- 2021 Alaska DOT&PH Statewide PFAS Addendum, Water Supply Well Search Work Plan:⁷⁸ PFAS compounds were detected at significant levels in groundwater (e.g., PFOS up to 23,000 ng/L), and traced primarily to historic and ongoing AFFF use. The well inventory targeted areas that were at risk of drinking water contamination. For affected properties, short-term use of alternative water supplies was recommended, with permanent municipal water connection recommended.
- 2021 ANC Taxiway Z West Expansion PFAS Site Investigation:⁷⁹ PFAS compounds (PFOS and PFOA) were detected in soil and groundwater samples collected along Taxiway Z. Groundwater PFOS concentrations reached up to 420 ng/L, and PFOA concentrations up to 110 ng/L. Several groundwater samples exceeded ADEC groundwater cleanup levels for PFOS (65 ng/L) and PFOA (15 ng/L). PFAS detections are attributed to historic and ongoing AFFF use in the area.
- 2022 ANC Taxiway Z West Expansion PFAS Site Investigation:⁸⁰ Follow-up sampling in the Taxiway Z West Expansion area detected PFAS compounds (PFOS and PFOA) in soil and groundwater. Groundwater PFOS concentrations reached up to 230 ng/L and PFOA concentrations up to 55 ng/L, both exceeding ADEC groundwater cleanup levels for PFOS (65 ng/L) and PFOA (15 ng/L). Results indicate PFAS migration attributable to historic and ongoing AFFF use in the area.
- 2024 ANC Fire Training Pit PFAS Site Characterization:⁸¹ PFOS concentrations in groundwater were frequently detected at levels greater than 1,500 ng/L and reached up to 36,000 ng/L, while PFOA concentrations reached up to 1,400 ng/L. These concentrations far exceed ADEC groundwater cleanup levels for PFOS (65 ng/L) and PFOA (15 ng/L), and EPA Maximum Contaminant Levels (MCLs, effective April 2024) of 4 ng/L for both PFOS and PFOA, confirming the Fire Training Pit area as a major PFAS source.

⁷⁷ Shannon & Wilson, Inc. 2020. Ted Stevens Anchorage International Airport PFAS Site Investigation: Postmark Bog Development Area. Accessed: <https://dot.alaska.gov/airportwater/docs/Anchorage%20International%20Airport/1204021-20-2176-CRW-ANC-Postmark-Bog-Development-PFAS-Investigation-092120.pdf>, October 2025

⁷⁸ Shannon & Wilson, Inc. 2021. Alaska DOT&PH Statewide PFAS Addendum 033-ANC-01: Water Supply Well Search. Accessed: <https://dot.alaska.gov/airportwater/docs/Anchorage%20International%20Airport/ANC%20GWP%20Addendum.pdf>, October 2025

⁷⁹ Shannon & Wilson, Inc. 2021. Ted Stevens Anchorage International Airport PFAS Site Investigation: Taxiway Z West Expansion Area. Accessed: <https://dot.alaska.gov/airportwater/docs/Anchorage%20International%20Airport/1213823-September-2021-PFAS-Results-Taxiway-Zulu-20-2332.pdf>, October 2025.

⁸⁰ Shannon & Wilson, Inc. 2022. Ted Stevens Anchorage International Airport PFAS Site Investigation: Taxiway Z West Expansion Area. Accessed: <https://dot.alaska.gov/airportwater/docs/Anchorage%20International%20Airport/1213823-September-2021-PFAS-Results-Taxiway-Zulu-20-2332.pdf>, October 2025

⁸¹ Shannon & Wilson, Inc. 2024. Alaska DOT&PH Statewide PFAS, ANC Fire Training Pit Site Characterization Report. Accessed: <https://dot.alaska.gov/airportwater/docs/Anchorage%20International%20Airport/2024-ANC-FTP-Site-Characterization-Report-32097215.pdf>, October 2025

Ongoing sampling and monitoring are being conducted by ANC in coordination with the Alaska Department of Transportation and Public Facilities (DOT&PF) and ADEC. PFAS management at ANC to date includes capping, onsite water treatment, and temporary storage of PFAS-contaminated soils northwest of Taxiway K.

Hazardous Materials. According to 49 CFR Part 172.101, hazardous materials are any substances commercially transported that pose unreasonable risk to public health, safety, and property. These substances include hazardous wastes and hazardous substances, as well as petroleum and natural gas substances and materials. As a result, hazardous materials represent hazardous wastes and substances. Examples include household batteries, gasoline, or fertilizers. Aircraft fuel constitutes the largest quantity of hazardous substances stored and consumed at the Airport. The Airport has multiple locations where fuel is stored. Alaska Frontier Constructors operates a Jet A fuel tank at their location in the South Airpark, Building 301. Anchorage Executive Airport operates a 20,000-gallon Jet A underground fuel farm at their location in the South Airpark, Buildings 302 and 303. Atlantic Aviation operates fuel tanks at their location in the South Airpark, Buildings 334, 336, and 337. Anchorage Fueling and Service Company maintains a fuel storage facility at the Airport, which has nine storage tanks with a combined capacity of 34.2 million gallons of Jet A fuel. Fuel is brought to the storage facility through an underground pipeline. International Aviation Services operates a 20,000-gallon Jet A fuel tank and two 12,000-gallon AvGas tanks. On Airport property are 20 active ADEC contaminated sites, 84 cleanup complete sites, and 13 cleanup complete – institutional controls sites (**Figure 2-45**).⁸²

There are no Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites, commonly known as Superfund sites, on Airport property. The closest Superfund site to the Airport, about five miles northeast of the Airport, is the Standard Steel & Metal Salvage Yard (Site EPA ID: AKD980978787).⁸³

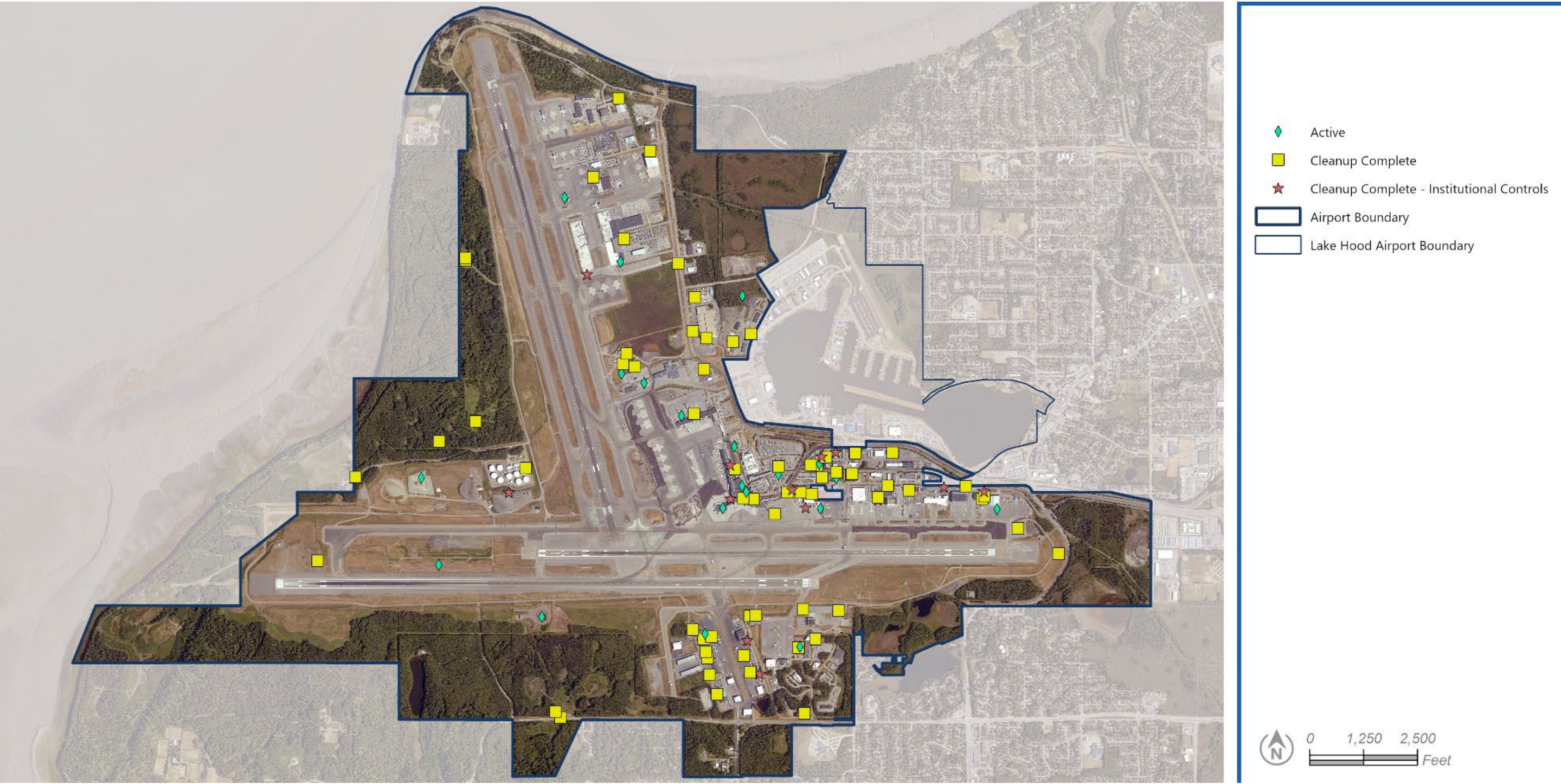
Deice trucks use Potassium Acetate liquid deicer. Sand trucks use NAAC Sodium Formate, and Sodium Formate/Acetate blend.⁸⁴

⁸² Alaska Department of Environmental Conservation, Division of Spill Prevention and Response, Contaminate Sites. Accessed: <https://dec.alaska.gov/spar/csp/>, February 2023.

⁸³ U.S. Environmental Protection Agency, Superfund, Search for Superfund Sites Where You Live. Accessed: <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>, March 2023.

⁸⁴ Snow and Ice Control Plan 2020-2021, Ted Stevens Anchorage International Airport.

Figure 2-45
Active Alaska Department of Environmental Conservation Contaminated Sites



2.9.6.2 Solid Waste

Solid waste is defined by the implementing regulations of RCRA and includes refuse and scrap metal and spent materials. Solid waste and recycling services are provided by Alaska Waste and the MOA Solid Waste Services. The MOA operates the Anchorage Regional Landfill, about 13 miles northeast of the Airport.⁸⁵ According to the USEPA Landfill Methane Outreach Program (LMOP), the landfill is projected to be operational until 2043.⁸⁶ The AIAS removes solid waste generated at the Airport in accordance with ADEC's Solid Waste Program.

2.9.6.3 Pollution Prevention

Pollution prevention includes methods used to avoid, prevent, or reduce pollutant discharges. The USEPA issued a National Pollution Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) for a Stormwater Pollution Prevention Plan (SWPPP) to the AIAS in 2009 authorizing stormwater discharge. Subsequently, the ADEC took primacy of the USEPA's NPDES permit program, now called the Alaska Pollutant Discharge Elimination System (APDES). The latest version the SWPPP was updated in August 2021 (APDES Permit Number AKR061001).⁸⁷ The SWPP covers drainage systems and deicing protocols at the Airport. The AIAS does not discharge stormwater in the Municipal Separate Storm Sewer System.⁸⁸ The AIAS has several control measures to manage pollution including grassy swales, constructed wetlands, oil/water separators, and water quality monitoring locations.

2.9.7 Historical, Architectural, Archeological, and Cultural Resources

The National Historic Preservation Act (NHPA) (54 U.S.C. §§300101 et seq.) establishes the Advisory Council on Historic Preservation (ACHP). The ACHP oversees federal agency compliance with the NHPA. The NHPA also established the National Register of Historic Places (NRHP) that the NPS oversees. Other applicable statutes and EOs include:

- American Indian Religious Freedom Act (42 U.S.C. § 1996);
- Antiquities Act of 1906 (54 U.S.C. §§320301-320303);
- Archeological and Historic Preservation Act (54 U.S.C. §§ 312501-312508);
- Archeological Resources Act (16 U.S.C. §§ 470aa-470mm);
- USDOT Act, Section 4(f) (49 U.S.C. § 303);
- Historic Sites Act of 1935 (16 U.S.C. §§ 461-467);
- Native American Graves Protection and Repatriation Act (25 U.S.C. §§ 3001-3013);
- Public Building Cooperative Use Act (40 U.S.C. §§ 601a, 601a1, 606, 611c, and 612a4);

⁸⁵ Municipality of Anchorage, Solid Waste Services, Disposal Locations. Accessed: <https://www.muni.org/departments/sws/dispose/pages/default.aspx>, March 2023.

⁸⁶ U.S. Environmental Protection Agency, Landfill Methane Outreach Program (LMOP). Accessed: <https://www.epa.gov/lmop/project-and-landfill-data-state>, March 2023.

⁸⁷ Alaska Department of Transportation and Public Facilities, Ted Stevens Anchorage International Airport, Stormwater Pollution Prevention Plan for Ted Stevens Anchorage International Airport (ANC) January 2020 v.2 August 2021.

⁸⁸ Alaska Department of Transportation and Public Facilities, Ted Stevens Anchorage International Airport, Stormwater Pollution Prevention Plan for Ted Stevens Anchorage International Airport (ANC) January 2020 v.2 August 2021.

- EO 11593, *Protection and Enhancement of the Cultural Environment* (36 FR 8921);
- EO 13006, *Locating Federal Facilities on Historic Properties in Our Nation's Central Cities* (61 FR 26071);
- EO 13007, *Indian Sacred Sites* (61 FR 26771);
- EO 13175, *Consultation and Coordination with Indian Tribal Governments* (65 FR 67249);
- Executive Memorandum, Government-to-Government Relations with Native American Tribal Governments (April 29, 1994);
- Executive Memorandum on Tribal Consultation (Nov. 5, 2009) (65 FR 67249); and
- USDOT Order 5650.1, *Protection and Enhancement of the Cultural Environment*.

According to the NPS, there is one NRHP-listed building on Airport property, the Kulis Hangar.⁸⁹ The Kulis Hangar was a part of the former Kulis Air National Guard Base, which opened in the spring of 1955. The Kulis Hangar is owned by AIAS and is located in what is now called the South Airpark (see **Figure 2-44**).

The Alaska Historic Preservation Act (AHPA; Alaska Statute [AS] 41.35.010-41.35.240) similarly addresses the treatment of cultural resources by undertakings under state jurisdiction, such as those requiring state permits, licenses, lands, or approvals. AHPA is a law that establishes state title to all historic, prehistoric, and archaeological resources located on state-owned or -controlled land including structures, buildings, ruins, sites, graves, artifacts, or fossils. There are several Alaska Heritage Resources Survey (AHRs) sites on Airport property that are eligible for historic designation; however, the location of these sites is protected due to their sensitive nature.⁹⁰

The Dena'ina have resided in this area for at least the last 1,500 years.^{91 92} Two prehistoric Dena'ina sites located within or adjacent to the Airport property have been recorded in the AHRs. Point Woronzof is a prehistoric/historic village site; recorded as a summer fish camp, place-name evidence identifies the importance of this location, with the name Nuch'ishtunt ("Place Protected from the Wind"). A fishing platform, or tanik'edi, was also set at Point Woronzof for dip netting as salmon runs commenced. Associated with tanik'edi is Q'is Kaq, a natural fresh-water spring that was reported as located adjacent to a summer fish camp.^{93 94} Both Native Village of Eklutna and Knik Tribal Council have expressed the importance of this area during previous Airport planning efforts.

⁸⁹ National Park Service, National Register of Historic Places. Accessed: <https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>, August 2024.

⁹⁰ Alaska Heritage Resources Survey, May 2023.

⁹¹ Fall, Davis and Dena'ina Team, *An Overview of Dena'ina Athabascan Uses of Sites on and near Elmendorf Air Force Base*, Alaska. 2003.

⁹² Kari and Fall, *Shem Pete's Alaska: The Territory of the Upper Cook Inlet Dena'ina*, University of Alaska Press, 2003.

⁹³ Fall, Davis and Dena'ina Team, *An Overview of Dena'ina Athabascan Uses of Sites on and near Elmendorf Air Force Base*, Alaska. 2003.

⁹⁴ Kari and Fall, *Shem Pete's Alaska: The Territory of the Upper Cook Inlet Dena'ina*, University of Alaska Press, 2003.

Cultural resource surveys have been conducted near the Airport since the 1930s. The Point Woronzof area, which was identified as an area of concern to local tribes during previous consultation efforts, has been surveyed on several different occasions. Section 106 compliance surveys, Cold War Air Defense military installation historic building and structure surveys, and Native ethnographic and historic land use studies have also been conducted near the Airport. While cultural resource investigations have been conducted within and adjacent to the Airport, it is likely that undocumented cultural resources may be located on or adjacent to the Airport.

There are nearly 200 Native Tribes listed on the Tribal Directory Assessment Tool (TDAT) that may have interest in the projects that occur in Alaska.⁹⁵ The Airport and Master Plan Update team members understand that an important element of the process included engaging with Native Tribes who have traditionally used the area in Northwest Anchorage. Representatives from the following four Native Tribes participated in the 2014 Master Plan process:

- Chickaloon Village Traditional Council
- Native Village of Eklutna
- Knik Tribal Council
- Native Village of Tyonek

Representatives of each Native Tribe were again invited to participate in the 2022 Master Planning process; however, Native Tribe representatives have elected not to participate as of June 2024.

2.9.8 Land Use

Various statutes, regulations, and EOs relevant to land use include:

- Airport and Airway Improvement Act of 1982, and subsequent amendments (49 U.S.C. 47107(a)(10));
- Airport Improvement Program (49 U.S.C. 47106(a)(1);
- Airport Safety, Protection of Environment, Criteria for Municipal Solid Waste Landfills (40 CFR § 258.10); and
- state and local regulations.

Incompatible land use causes conflict between airport sponsors and their adjacent communities. Development adjacent to airports often encroaches upon them and limits their service capabilities. When incompatible land uses encroach upon airports, FAA requirements for airspace and land use protection become key concerns. If airport sponsors fail to meet FAA and

⁹⁵ U.S. Department of Housing and Urban Development, Tribal Directory Assessment Tool. Accessed: <https://egis.hud.gov/TDAT/>, March 2023.

state requirements, they can lose access to significant grant-in-aid funds, impacting local economies and airport services.

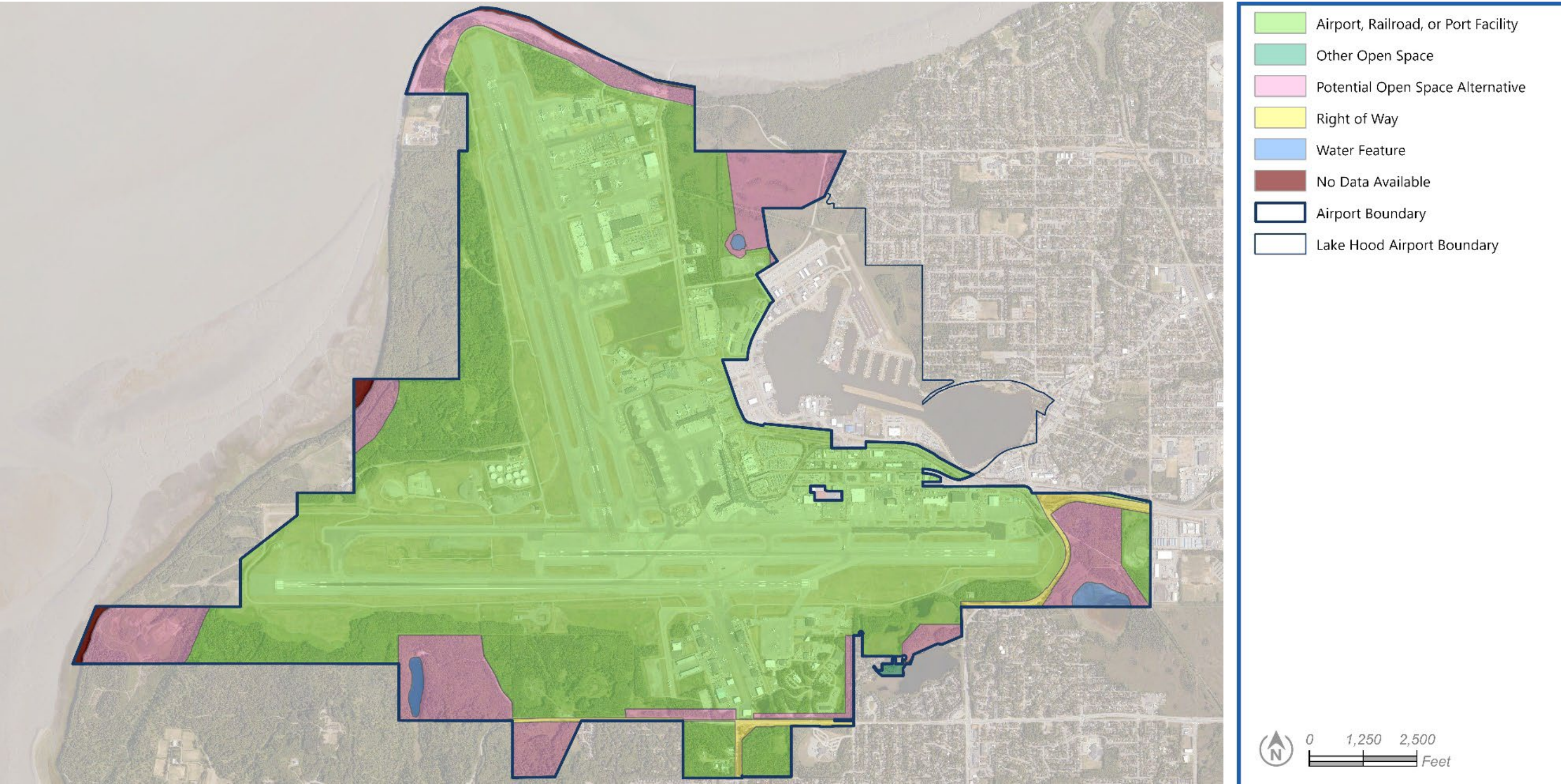
FAA has specific definitions, regulations, and assurances to enforce airspace protection; aircraft safety; and airport design, management, and operations. Moreover, federal grant assurances require airport sponsors to comply with specific airport performance measures. Airport sponsors accept these assurances as a condition of receiving federal funds. The Airport has received FAA funds and is, therefore, subject to all FAA grant assurances, including land use protection.

Airport property contains land designated by the MOA as Airport, Railroad, or Port Facility, Other Open Space, Potential Open Space Alternative, Right of Way, and Water Feature (see **Figure 2-46**). Other Open Space applies to non-municipal public and private open spaces that function as part of the MOA system of parks, open spaces, outdoor recreational facilities, and natural preservation areas.⁹⁶ The Potential Open Space Alternative lands are development reserves subject to owner facility and associated jurisdictions and reflects natural open space or possible recreation as an alternative use should some of these areas be preserved or change ownership.⁹⁷

⁹⁶ Municipality of Anchorage, Anchorage 2040 Land Use Plan. Accessed: <https://www.muni.org/Departments/OCPD/Planning/Publications/Pages/Anchorage2040LandUsePlan.aspx>, February 2023.

⁹⁷ Municipality of Anchorage, Anchorage 2040 Land Use Plan. Accessed: <https://www.muni.org/Departments/OCPD/Planning/Publications/Pages/Anchorage2040LandUsePlan.aspx>, February 2023.

Figure 2-46
Land Use at the Airport



2.9.9 Natural Resources and Energy Supply

Statutes and EOs that are relevant to natural resources and energy supply include:

- Energy Independence and Security Act (42 U.S.C. § 17001 et seq.);
- Energy Policy Act (42 U.S.C. § 15801 et seq.);
- EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (72 FR 3919); and
- EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (74 FR 52117); and
- EO 13834, *Efficient Federal Operations* (83 FR 23771).

Natural resources (e.g., water, asphalt, aggregate, etc.) and energy use (e.g., fuel, electricity, etc.) at an airport is a function of the needs of aircraft, support vehicles, airport facilities, support structures, and terminal facilities. Energy use at the Airport is primarily in the form of electricity required for the operation of Airport-related facilities (e.g., terminal, fixed-base operator (FBO), hangars, airfield lighting) and fuel for aircraft, aircraft support vehicles/equipment, and Airport maintenance vehicles/equipment.

The Chugach Electric Association provides electricity, ENSTAR provides natural gas, and the Anchorage Water and Wastewater Utility provides public water and sewer service to the developed areas of the Airport.⁹⁸

The AIAS has implemented several measures to reduce energy consumption, including installing automated light switches in buildings, replacing low efficiency lighting with high efficiency lighting, and replacing traditional boilers with high efficiency boilers. In 2012, the AIAS replaced its existing fuel dispensing system and upgraded the fueling controls and fuel management system at the Quick-Turnaround Facility Fueling Canopy. This resulted in reduced travel time and fuel usage for refueling.

Cardboard recycling from Airport tenants and State of Alaska operations prevented more than 150,000 pounds of cardboard from going to the landfill in 2010 and 300,000 pounds in 2011. Other materials recycled from the Airport include newspaper, office paper, scrap metals, reclaimed / reground asphalt, concrete, used oil, printer and toner cartridges, and other materials.

⁹⁸ Municipality of Anchorage, Residents, Utilities. <https://www.muni.org/residents/pages/utilities.aspx>, March 2023.

2.9.10 Noise and Noise-Compatible Land Use

Statutes and EOs relevant to noise and noise-compatible land use include:

- The Control and Abatement of Aircraft Noise and Sonic Boom Act of 1968 (49 U.S.C. § 44715);
- The Noise Control Act of 1972 (42 U.S.C. §§ 4901-4918);
- Aviation Safety and Noise Abatement Act of 1979 (49 U.S.C. § 47501 et seq.);
- Airport and Airway Improvement Act of 1982 (49 U.S.C. § 47101 et seq.);
- Airport Noise and Capacity Act of 1990 (49 U.S.C. §§ 47521-47534, §§ 106(g);
- Section 506 of the FAA Modernization and Reform Act of 2012, *Prohibition on Operating Certain Aircraft Weighing 75,000 Pounds of Less Not Complying with Stage 3 Noise Levels* (49 U.S.C. §§ 47534); and
- State and local noise laws and ordinances.

Day-Night Sound Level (DNL) is based on sound levels measured in relative intensity of sound, decibels (or dB) on the "A-weighted scale" (or dBA) over a time-weighted average normalized to a 24-hour period.⁹⁹ DNL has been widely accepted as the best available method to describe aircraft noise exposure. The USEPA identifies the DNL as the principal metric for aircraft noise analysis. The FAA requires DNL as the noise descriptor for use in aircraft noise exposure analysis and noise compatibility planning. DNL levels are commonly shown as lines of equal noise exposure, like terrain contour maps, referred to as noise contours. All residential areas are considered compatible with cumulative noise level below DNL 65 dBA.

Title 14 of CFR Part 150, Airport Noise Compatibility Planning regulates airport noise associated with air operation. Part 150 requires the use of DNL to determine existing and potential (projected to occur in the future) noise levels based on forecasts. The FAA Aviation Environmental Design Tool (AEDT) generates the DNL noise contours. The AEDT evaluates noise impacts near an airport, considering fleet mix, numbers of operations, flight tracks, and time of day. The purpose of the Part 150 study is to identify existing and potential future noise exposure, evaluate various alternatives, and make recommendations on viable noise abatement or mitigation measures. The Part 150 Study process has two steps:

- 1) Establish Noise Exposure Maps (NEMs), which identify the levels of airport noise in areas around the airport; and
- 2) Develop a Noise Compatibility Program (NCP) designed to reduce the number of people and/or incompatible land uses within the airport's noise contours.

The NEMs are submitted to the FAA for acceptance, and the NCP is submitted to FAA for approval. If approved, the NCP measures or recommendations are eligible for implementation and federal funding.

⁹⁹ Federal Aviation Administration, Technical Support for Day/Night Average Sound Level (DNL) Replacement Metric Research, Final Report, June 14, 2011.

Airports are not required to complete Part 150 studies, but there are financial incentives for doing so as federal funds are available to prepare Part 150 studies and for implementing measures recommended in the NCP. For example, the NCP allowed the Airport to receive federal funding to implement a Residential Sound Insulation Program (RSIP) and other measures. Part 150 studies generally have a 5-year planning horizon and identify/evaluate current and future noise/land use.

The 2014 Master Plan Update identified several incompatible land uses within the DNL 65 dB noise contour near the Airport.¹⁰⁰ However, the AIAS completed an FAA FAR Part 150 Noise Compatibility Study in 1987 with the NCP approved by the FAA in 1988. Since then, the AIAS has updated its NCP in 2000 and again in 2015. As such, some of the incompatible land uses (i.e., residences) have been sound insulated in compliance with the FAA-approved NCPs, and therefore, are compatible land uses. The most recently FAA-accepted NEMs and FAA-approved NCP are from 2015.

2.9.10.1 Noise Exposure Maps (NEMs)/Noise Contours

Part 150 regulations identify the requirements for developing NEMs and the information that must be included in them. NEMs must show noise contours (65, 70, and 75 DNL) and identify non-compatible land uses within these. Noise contour maps must depict the average annual DNL in areas around the airport. Since DNL noise contours represent annual average conditions, the noise levels that people hear (single event levels) are different than the metric used in the analysis. DNL is based upon the type of aircraft operated, the number of operations, the runways used, the aircraft flight tracks, and the timing of operations. Appendix A of 14 CFR Part 150 outlines land uses that are considered compatible with the DNL 65-, 70-, and 75-dB noise contours. Only those noise sensitive uses within the DNL 65 dB and greater noise contours are eligible for federal funding for mitigation measures (e.g., acquisition or insulation).

The AIAS developed noise contours for the 2009 base year and noise contours for future 2020 noise contour forecast conditions. The 2009 base year noise contours are depicted in **Figure 2-47** and the 2020 future noise contours are depicted in **Figure 2-48**. The 2009 base year contours contain incompatible land uses within the 75 dB DNL noise contour near the Airport (see **Figure 2-49**).¹⁰¹ Near the Runway 15 end there is a portion of Point Woronzof Buffer Park and the Tony Knowles Coastal Trail within the 75 dB DNL. Near the Runway 7 end there is a portion of the Kincaid Park Trail Network within the 75 dB DNL. The compatible land use standards found in 14 CFR Part 150, *Airport Noise Compatibility Planning*, Appendix A, Table 1, show there is a significant impact in parks above 75 dB DNL. FAA Order 1050.1G states, "Special

¹⁰⁰ RS&H. Ted Stevens Anchorage International Airport, 2014 Master Plan Update, 2014.

¹⁰¹ RS&H. Ted Stevens Anchorage International Airport, 2014 Master Plan Update, 2014.

consideration needs to be given to the evaluation of the significance of noise impacts on noise sensitive areas within Section 4(f) properties (including, but not limited to, noise sensitive areas within national parks; national wildlife and waterfowl refuges; and historic sites, including traditional cultural properties) where the land use compatibility guidelines in 14 CFR Part 150 are not relevant to the value, significance, and enjoyment of the area in question.” For example, the DNL 65 dB threshold does not adequately address the impacts of noise on visitors to areas within a national park or national wildlife and waterfowl refuge where other noise is very low, and a quiet setting is a generally recognized purpose and attribute. Further evaluation would be needed to determine if the land use guidelines are relevant to the parks near the Airport. There are no residential areas within the 65 dB DNL.

Figure 2-47
2009 NEM Noise Contours

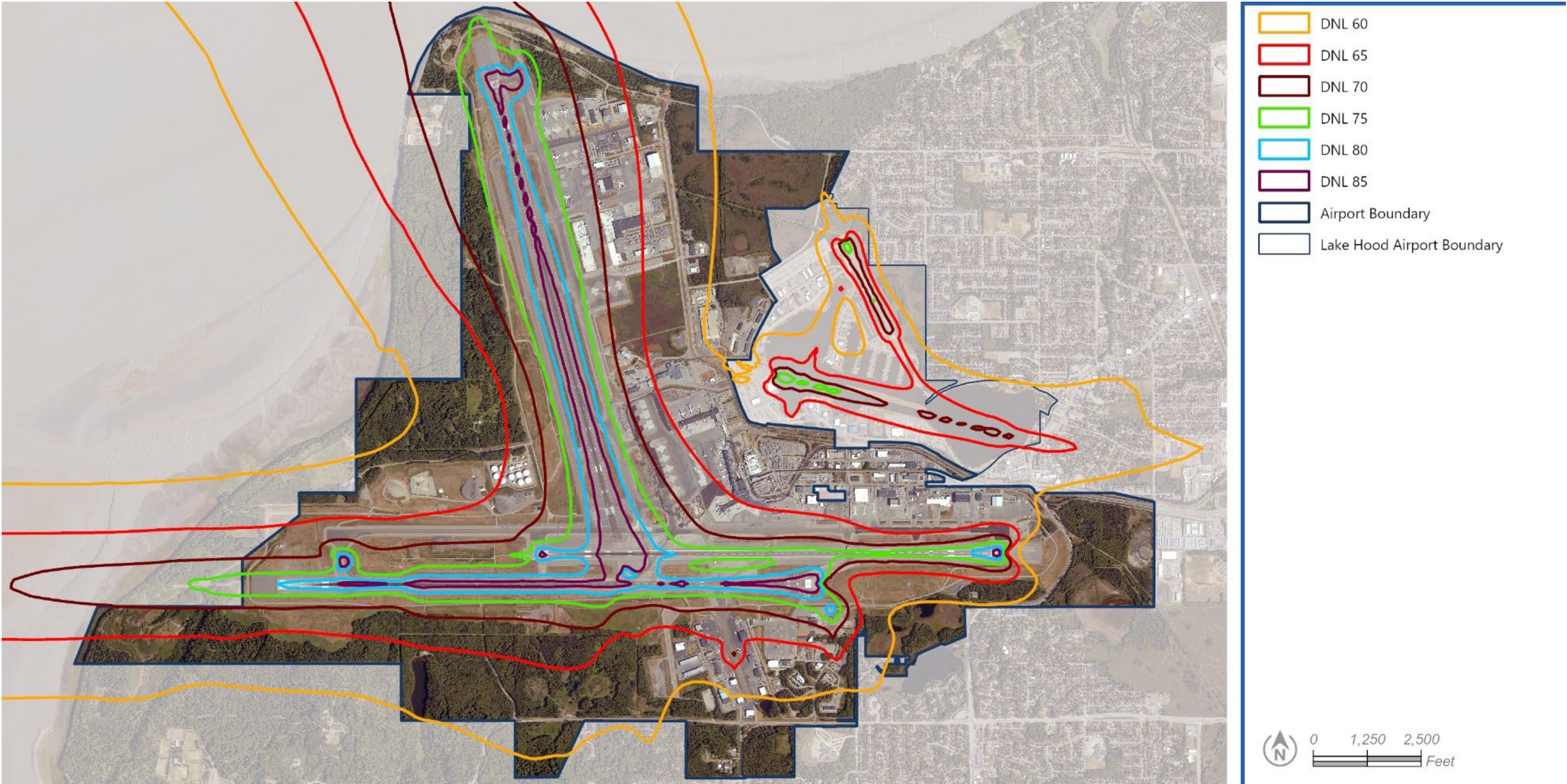
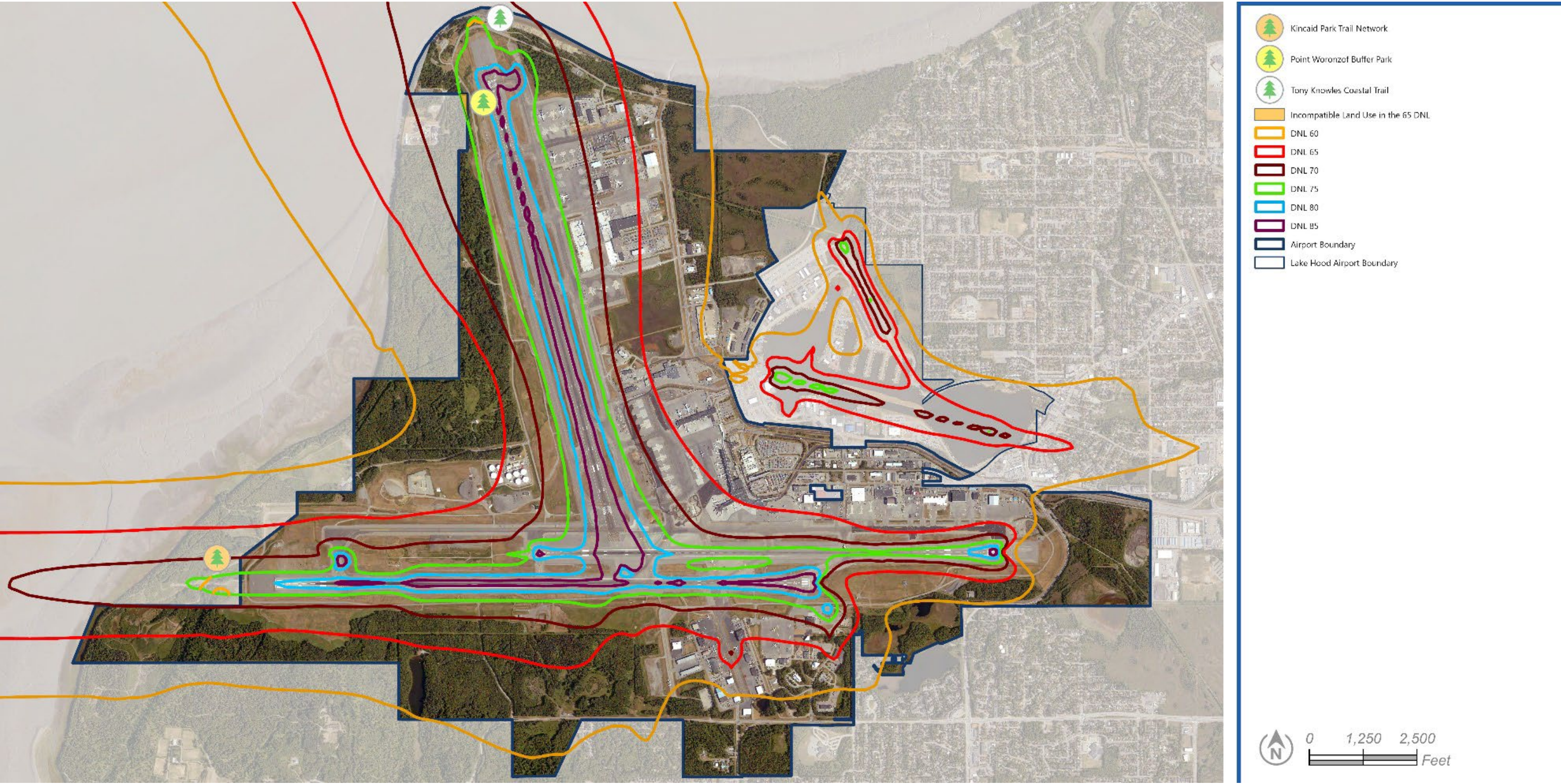


Figure 2-48
2020 NEM Noise Contours



Figure 2-49
Incompatible Land Uses in the 2009 NEM Noise Contours



2.9.10.2 Noise Compatibility Program (NCP)

The NCP includes all the measures that are recommended for reducing noise impacts and non-compatible land uses within the Airport's noise contours. There are two main types of measures included in NCPs:

- 1) Operational or noise abatement measures (i.e., changes in Airport facilities and / or Air Traffic Control procedures intended to reduce noise exposure to the surrounding community); and
- 2) Land use measures and administrative measures (i.e., changes in land use or land use regulations to reduce construction or operation of non-compatible uses within the Airport's noise contours). As discussed earlier, the most recent NCP was approved by FAA in 2015.

The approved 1999 NCP resulted in the AIAS establishing a voluntary preferential runway use program to minimize noise impacts on nearby residential areas. The normal flow of traffic operations, contingent upon weather and pilot judgment, includes arrivals to the east or south and departures to the north or west. It is likely that this measure has played the greatest role in minimizing noise impacts.

In 2001, the AIAS implemented a Residential Sound Insulation Program (RSIP) to reduce inside noise levels for homes within the 65 DNL contour. The RSIP makes soundproofing improvements, which include installing acoustically rated windows and doors, to eligible homes to reduce interior noise to or below 45 DNL. Under the RSIP, the AIAS sound insulated more than 880 homes impacted by aircraft noise since 2001.¹⁰² Funding for the last area of homes within the previous eligibility boundaries was granted and the homes owned by residents who applied for coverage were soundproofed in Fiscal Year (FY) 2013. The AIAS completed construction in the summer of 2013 with post construction testing and financial close out extending into FY 2014.

In the 2015 NCP Update, the FAA approved a voluntary reduced use of reverse thrust from landing jets as a noise abatement measure. Several measures to continue reducing noise impacts to the community from the 2000 NCP were recommended for continuation:

- Continuing insulation of residential structures was approved subject to meeting the requirements outlined in the 2000 NCP; and
- Informing potential homeowners and renters they may be exposed to increased noise levels; and
- Building code requirements with sound attenuation in new developments; and
- Zoning code standards including sound attenuation; and
- Development of "Fly Quiet Report Card" and Pilot Awareness Program; and
- Continuation of public information program and noise information page on Airport website; and

¹⁰² Airport Staff, 2014.

- Comment submittal form available to the public on the Airport website; and
- Addressing noise comments by existing airport staff; and
- Installation of new flight tracking system that can also track noise; and
- Updating the NEM and NCP as conditions change.

The AIAS is planning on updating the NCP in 2024.

2.9.11 Socioeconomics and Children’s Health and Safety Risks

The primary considerations of socioeconomics analysis are the economic activity, employment, income, population, housing, public services, and social conditions of the area. The Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970 (42 U.S.C. § 61 et seq.), implemented by 49 CFR Part 24, is the primary statute related to socioeconomic impacts. EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885) is the primary directive relevant to children’s health and safety risks.

Airport property intersects four Census Block Groups as outlined in **Table 2-33** and depicted in **Figure 2-50**.¹⁰³

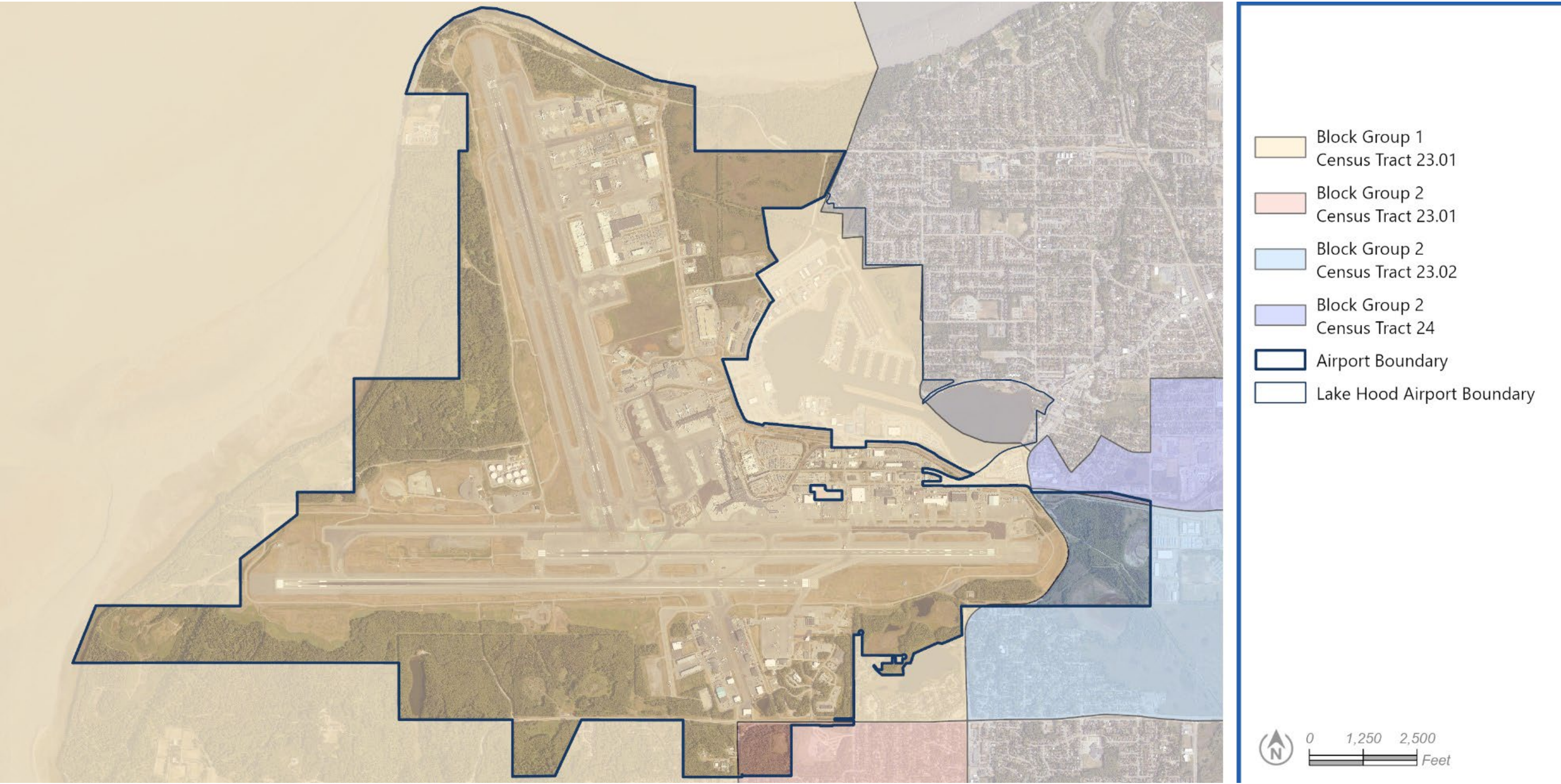
Table 2-33
Census Tract Block Groups Intersecting Airport Property

Census Tract	Block Group
23.01	1
23.01	2
23.02	2
24.00	2

Source: US Census Bureau

¹⁰³ U.S. Census Bureau, Geography. Accessed: <https://data.census.gov/advanced>, February 2023.

Figure 2-50
Census Block Groups Overlapping Airport Property



2.9.11.1 Socioeconomics

Population and Housing

Table 2-34 compares population and housing data for the Airport census tracts compared to the MOA and the State of Alaska. The highest percentage of occupied households is in the four Census Block Groups that intersect Airport property (the Airport Census Tracts) and the highest average persons per household are in the Airport Census Tracts.

Table 2-34
Population and Housing Characteristics

Characteristic	Airport Census Tracts	Municipality of Anchorage	State of Alaska
Total Population	8,180	291,247	733,391
Total Households	3,071	118,640	326,200
Percent Households Occupied	93.7	92.2	82.5
Average Persons Per Household	2.6	2.5	2.2

Source: U.S. Census Bureau, 2020

Economic Activity and Income

With nearly half the Alaska’s population in Anchorage, the MOA is the center of commerce for the State of Alaska. Many statewide industries, including oil and gas, finance and real estate, transportation, communications, and governmental agencies have their headquarters in Anchorage. **Table 2-35** lists the largest occupations in Anchorage.

Table 2-36 compares the median income for the Airport Census Tracts compared to the MOA and the State of Alaska.

Table 2-35

Largest Occupations in Anchorage, Alaska, May 2022

Occupation	Employment
Retail Salespersons	5,010
Registered Nurses	4,550
Stockers and Order Fillers	4,090
Home Health and Personal Care Aides	4,010
Fast Food and Counter Workers	3,830
General and Operations Managers	3,530
Office Clerks, General	2,970
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,560
First-Line Supervisors of Office and Administrative Support Workers	2,400
Bookkeeping, Accounting, and Auditing Clerks	2,400

Source: Bureau of Labor Statistics, 2022.

Table 2-36

Income Characteristics

Characteristic	Airport Census Tracts	Municipality of Anchorage	State of Alaska
Average Median Income	\$123,893	\$86,654	\$77,845

Source: U.S. Census Bureau, 2021.

The socioeconomic situation in a community or region can have a significant impact on the future demand for air travel and air traffic activity. Local population, employment, and income are key socioeconomic factors that affect aviation demand. However, a large portion of the activity at the Airport is associated with international air cargo and non-Alaska visitors, as reported by the University of Alaska Anchorage Institute of Social and Economic Research (ISER) in 2007.¹⁰⁴ The contribution of the Airport to the economy of the community and Alaska goes beyond the generation of jobs and payroll from providing air transport and other services. The Airport is part of the transportation system that links Alaskans and Alaska businesses to each other and to the rest of the world.

Employment

Table 2-37 compares unemployment rates for the Airport Census Tracts compared to the MOA and the State of Alaska. The Airport Census Tracts have the lowest unemployment percentage, while the State of Alaska has the highest unemployment percentage.

¹⁰⁴ Institute of Social and Economic Research, Ted Stevens Anchorage International Airport: Economic Significance, 2007.

Table 2-37
Employment Characteristics

Characteristic	Airport Census Tracts	Municipality of Anchorage	State of Alaska
Percent Unemployed	5.3	6.6	7.0

Source: U.S. Census Bureau, 2020

Public Services

The Airport Police and Fire Department provide police, firefighting, and emergency medical services.¹⁰⁵ The closest hospital is the Saint Elias Specialty Hospital, over four miles east of the Airport.¹⁰⁶

2.9.11.2 Children’s Health and Safety

Environmental health risks and safety risks that could disproportionately affect children include risks that are attributable to products or substances that a child is likely to contact or ingest, such as air, food, drinking water, recreational waters, and soil. While there is hazardous waste and contaminated sites on the Airport, children do not have access to these areas and are not exposed to them.

There are no schools, daycares, or childcare facilities on Airport property. The closest school Kincaid Elementary School, near the southern boundary of the Airport.¹⁰⁷ There are two childcare facilities that are adjacent to Airport property, the YMCA – Kincaid School Age-Child Development Site and Bright Beginnings Early Learning Center.¹⁰⁸ However, these facilities are outside the 65 dB DNL for noise-sensitive land uses.

2.9.12 Visual Effects

There is no federal statutory or regulatory requirement that regulates light emissions or visual impacts. FAA Order 1050.1G describes factors to consider for light emissions and visual resources/visual character.

2.9.12.1 Light Emissions

Various lighting features currently illuminate portions of the Airport, such as buildings, access roadways, automobile parking areas, and airfield lighting, such as taxiway lighting and runway

¹⁰⁵ Ted Stevens Anchorage International Airport, Airport Police & Fire. Accessed: <https://ancairport.com/about/airport-police-fire/>, March 2023.

¹⁰⁶ U.S. Environmental Protection Agency, NEPAassist, Places, Hospitals. Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=anc+airport>, March 2023.

¹⁰⁷ U.S. Environmental Protection Agency, NEPAassist, Places. Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=anc+airport>, September 2024.

¹⁰⁸ Department of Health and Safety, Homeland Infrastructure Foundation-Level Data (HIFLD): Child Care Centers. Accessed: <https://hifld-geoplatform.hub.arcgis.com/datasets/geoplatform::child-care-centers/explore>, September 2024.

lighting, for the safe and secure movement of people and vehicles (e.g., aircraft, passenger cars, etc.). Airport light emissions are continuous because the Airport operates 24 hours per day, requiring lighting at the terminals and other operational areas. The AIAS does not typically light the undeveloped areas outside of the Air Operations Area (AOA).

2.9.12.2 Visual Resources and Visual Character

Structures at the Airport include, but are not limited to, FBOs, hangars, and maintenance buildings. There are residences bordering Airport property to the south and east. However, there is no direct line of sight as these neighborhoods have vegetation buffers blocking direct line of sight to the Airport facilities. The visual character of the developed areas of the Airport are consistent with surrounding commercial and industrial developed areas. The undeveloped areas of the Airport and nearby areas are generally a combination of delta outwash from previous glaciers combined with vegetation covered sand dunes that produce undulating terrain adjacent to Cook Inlet. Airport property generally includes two distinct terrain characters: the undulating terrain perched on a plateau, and lower and flatter lowland adjacent to Cook Inlet. The upper area provides views of distant mountains and overlooks the lower terrain and Cook Inlet.

2.9.13 Water Resources

Water resources include wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers. These resources typically function as a single, integrated natural system that are important in providing drinking water in supporting recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems.

2.9.13.1 Wetlands

Statutes and EOs that are relevant to wetlands include:

- EO 11990, *Protection of Wetlands* (42 FR 26961);
- Clean Water Act (33 U.S.C. §§ 1251-1387);
- Fish and Wildlife Coordination Act (16 U.S.C. § 661-667d) ;
- USDOT Order 5660.1A, *Preservation of the Nation's Wetlands*; and
- State statutes protecting wetlands.

The Clean Water Act defines wetlands as "...those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."¹⁰⁹ The U.S. Army Corps of Engineers' (USACE) wetland delineation manual requires that positive indicators of a wetland be present for hydrophytic vegetation, hydric soil, and

¹⁰⁹ U.S. Environmental Protection Agency, Section 404 of the Clean Water Act. Accessed: <https://www.epa.gov/cwa-404/section-404-clean-water-act-how-wetlands-are-defined-and-identified>, January 2023.

hydrology. Wetlands are defined by their hydrology, abundance of hydrophytic plants and abundance of hydric soils.¹¹⁰

According to the National Wetland Inventory (NWI), wetlands exist near the Airport and on Airport property (see **Figure 2-51**).¹¹¹ The wetlands are concentrated in three separate areas: (1) the northeastern portion of Airport property, (2) the southeastern portion of Airport property, and (3) along Airport property that is directly adjacent to the shoreline to the north and west. The MOA also maintains a database of wetlands that are rated by value (see **Figure 2-52**).¹¹² The MOA wetlands are mostly in the northeastern and southeastern portions of Airport property. Wetland communities on Airport property predominantly include shrub-ericaceous bogs and black spruce (*Picea mariana*) forests.

2.9.13.2 Floodplains

Statutes and EOs that are relevant to floodplains include:

- EO 11988, *Floodplain Management* (42 FR 26951);
- National Flood Insurance Act (42 U.S.C. § 4001 et seq.);
- USDOT Order 5650.2, *Floodplain Management and Protection*; and
- State and local statutes protecting floodplains

Floodplains are "...lowland areas adjoining inland and coastal water which are periodically inundated by flood waters, including flood-prone area of offshore islands."¹¹³ Floodplains are often referred to in terms of the 100-year floodplain, rather, the one percent chance of a flood occurring in any given year. The USDOT Order 5650.2 outlines the policies and procedures for ensuring that proper consideration is given to the avoidance and mitigation of adverse floodplain impacts in agency actions, planning programs, and budget requests. Therefore, the objective is to avoid, to the extent practicable, any impacts within the 100-year floodplain.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), there are floodplains near the Airport and on Airport property (see **Figure 2-53**).¹¹⁴ The

¹¹⁰ U.S. Army Corps of Engineers, Corps of Engineers Wetland Delineation Manual. Accessed:

<https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>, February 2023.

¹¹¹ U.S. Fish and Wildlife Service, National Wetlands Inventory. Accessed: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>, February 2023.

¹¹² Municipality of Anchorage, Wetlands. Accessed: <https://www.muni.org/departments/ocpd/planning/zoning/pages/wetlands.aspx>, May 2023.

¹¹³ Federal Aviation Administration, Order 1050.1 Desk Reference, Chapter 14 *Water Resources*. Accessed:

https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faa_nepa_order/desk_ref, February 2023.

¹¹⁴ Federal Emergency Management Agency, Flood Map Service Center, Flood Insurance Rate Maps 0200050710D (effective 9/25/2009), 0200050730D (effective 9/25/2009), 0200050715D (effective 9/25/2009), 0200050720D (effective 9/25/2009), 0200050740D (effective 9/25/2009), 0200050739D (effective 9/25/2009), 0200050741D (effective 9/25/2009), Accessed: <https://msc.fema.gov/portal/search>, February 2023.

floodplains are concentrated in the eastern portions of Airport property, as well as along Airport property that is directly adjacent to the shoreline to the north and west.

Figure 2-51
National Wetland Inventory Wetlands

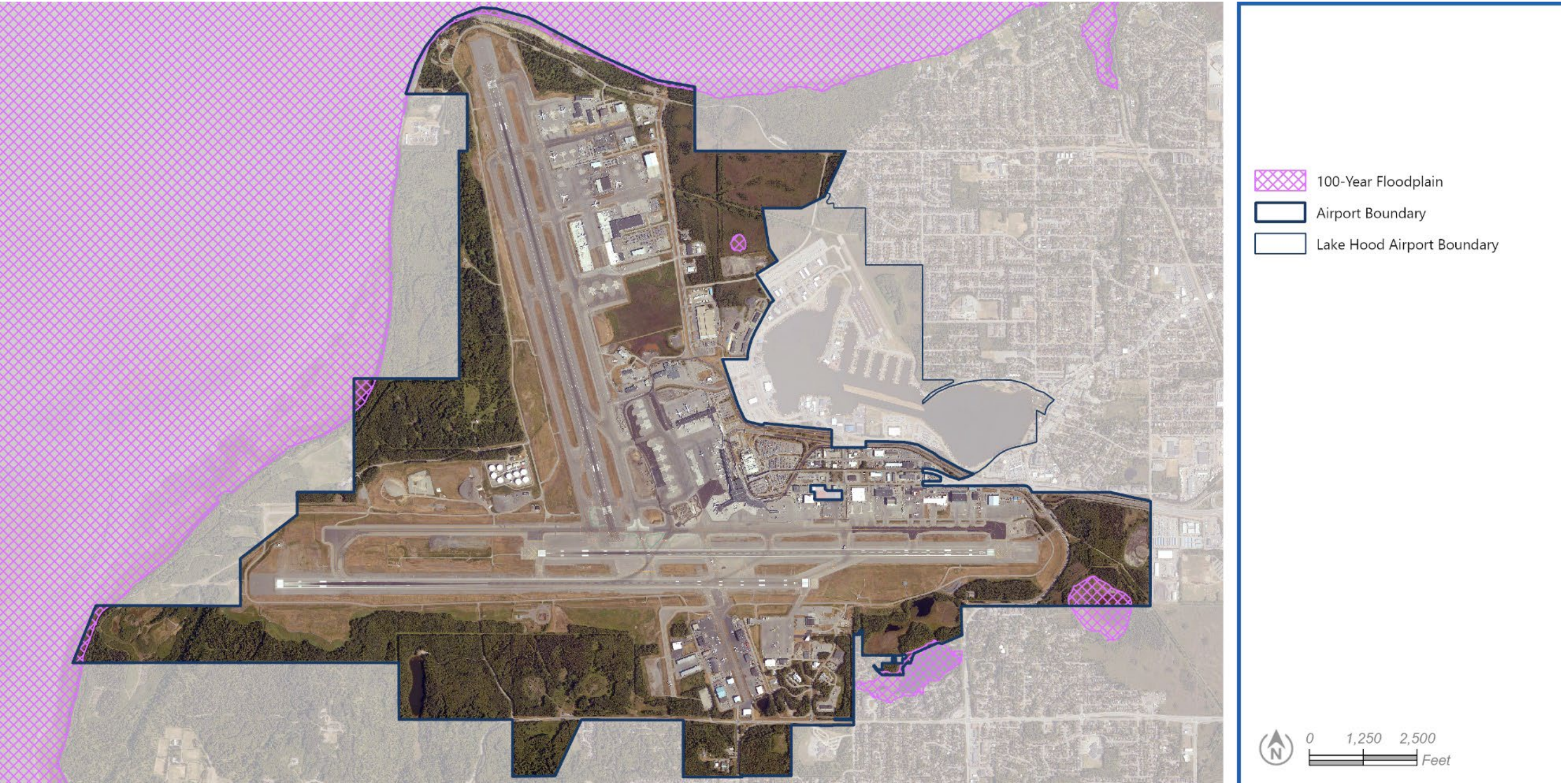


Figure 2-52
Municipality of Anchorage Wetlands



Sources: Esri, 2023; MOA, 2023; RS&H, 2023

Figure 2-53
Floodplains



2.9.13.3 Surface Waters

Statutes that are relevant to surface water include:

- Clean Water Act (33 U.S.C. §§ 1251-1387);
- Fish and Wildlife Coordination Act (16 U.S.C. § 661-667d);
- Rivers and Harbors Act (33 U.S.C. § 401 and 403);
- Safe Drinking Water Act (42 U.S.C. §§ 300(f)-300j-26; and
- State statutes protecting surface waters.

Surface waters include areas where water collects on the surface of the ground, such as streams, rivers, lakes, ponds, estuaries, and oceans. Airport property contains several water bodies: Meadow Lake, Delong Lake, Sullivan Pond, Little Campbell Lake, Connors Lake, and several unnamed water bodies (see **Figure 2-54**).¹¹⁵

To make sure operations at the Airport do not degrade nearby water bodies, the AIAS implemented a comprehensive SWPPP that contains several best management practices (BMPs). The most recent SWPPP was approved in August 2021. The SWPPP has two purposes: 1) to integrate other Airport environmental compliance programs to prevent stormwater pollution and 2) to meet requirements of the Airport's 2009 National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit, which subsequently transferred to the APDES¹¹⁶.

¹¹⁵ U.S. Environmental Protection Agency, NEPAAssist, Water Features, Water Bodies. Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=anc+airport>, February 2023.

¹¹⁶ Ted Stevens Anchorage International Airport, Ted Stevens Anchorage International Airport Storm Water Pollution Prevention Plan, 2009.

Figure 2-54
Surface Waters on Airport Property



2.9.13.4 Groundwater

Statutes relevant to groundwater include:

- Safe Drinking Water Act (42 U.S.C. §§ 300(f)-300j-26); and
- State statutes protecting groundwater.

Groundwater is described as the “subsurface water that occupies the space between sand, clay, and rock formations.”¹¹⁷ The Airport is in the Knik Arm-Frontal Cook Inlet Watershed (HUC12: 190204010808), and the North Fork Campbell Creek Watershed (HUC12: 190204010603).¹¹⁸ The Airport is not within a sole source aquifer.¹¹⁹

The Airport’s watershed covers approximately 5,000 acres and includes five sub-watersheds, designated Drainage Basin ‘A’ through ‘E’, with each of these sub-watersheds draining to a separate discharge point in Lake Spenard, Lake Hood, Knik Arm or Turnagain Arm.¹²⁰

The area near the Airport generally includes a shallow, unconfined aquifer and a deep, confined aquifer. The relatively impermeable clay fraction of the Bootlegger Cove Formation significantly influences drainage and water quality near the Airport.¹²¹ On most Airport property and throughout most of the surrounding region, a shallow, unconfined aquifer is perched above the extensive cohesive deposits of the Bootlegger Cove formation. Beneath the Bootlegger Cove deposits is a confined aquifer kept under pressure by the impervious clay cap.¹²²

Groundwater is sometimes pumped into Lakes Hood and Spenard on an as-needed basis to replace diverted surface runoff and maintain required water elevations. According to the 2006 Lake Hood and Anchorage International Airport General Aviation Airport Master Plan, storm drain diversion structures have been constructed to reduce pollutant flows into the lakes. However, diverting stormwater runoff also results in reducing the quantity of water the lakes receive. This is why pumping the groundwater into the lakes is sometimes necessary.

Existing storm drain structures at the Airport include both closed conduits and open channels.¹²³ These range from a series of ditches and culverts to closed conduit drainage systems that

¹¹⁷ Federal Aviation Administration, 1050.1 Desk Reference, Chapter 14 *Water Resources*. Accessed:

https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faa_nepa_order/desk_ref, July 2020.

¹¹⁸ U.S. Environmental Protection Agency, NEPAassist, Water, Watersheds. Accessed:

<https://nepassistentool.epa.gov/nepassistent/nepamap.aspx?wherestr=anc+airport>, March 2023.

¹¹⁹ U.S. Environmental Protection Agency, NEPAassist, Water, Sole Source Aquifers. Accessed:

<https://nepassistentool.epa.gov/nepassistent/nepamap.aspx?wherestr=anc+airport>, March 2023.

¹²⁰ Alaska Department of Transportation and Public Facilities, Ted Stevens Anchorage International Airport, Watershed. Accessed:

<https://dot.alaska.gov/anc/business/environmental/watershed.shtml>, March 2023.

¹²¹ HNTB Corporation, Ted Stevens Anchorage International Airport Master Plan Update, 2002.

¹²² Ibid.

¹²³ HNTB Corporation, Ted Stevens Anchorage International Airport Master Plan Update, 2002.

convey Airport runoff to either Cook Inlet, Lake Hood, or Lake Spenard. Sub-drain systems are located beneath some runways and taxiways to direct groundwater from the structural prism into the storm drain system.¹²⁴ The most recent SWPPP was updated in August 2021.

Snow disposal practices play a key role in water quality at the Airport. The AIAS practices snow separation where airside snow mixes with deicing waste and non-airside snow is disposed of in separate designated areas. Airside and landside snow dumps have areas where natural biological treatment can occur prior to entering the stormwater drainage system. During the winter season, there is an airside snow dump that utilizes part of the Postmark Bog as a biofilter.

In 2012, the AIAS constructed two stormwater drainage projects. The East Airpark Storm Drainage extension consists of 1.7 miles of new storm drain from Drainage Basin A to Basin D. The federally funded project also constructed a new pump station and modified an existing lift station. The \$9 million project involved three borings, a gravity storm sewer, a force main, roadway and parking area pavement replacement and marking, and a curb and gutter. A separate state funded project repaired approximately 2,000 feet of corrugated polyethylene storm drainpipe along Postmark Drive.

The AIAS uses passive and active treatment systems to treat stormwater, including skimming systems, grassy swales, settling ponds, settling channels, and several oil / grit separators.

2.9.13.5 Wild and Scenic Rivers

Statutes relevant to wild and scenic rivers include:

- Wild and Scenic Rivers Act (16 U.S.C. §§ 1271-1278).

Wild and scenic rivers are defined as “outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.”¹²⁵ There are no Wild and Scenic Rivers on Airport Property. The closest Wild and Scenic River is the Tlikakila Wild and Scenic River, about 90 miles southwest of the Airport.¹²⁶ The closest river registered in the Nationwide Rivers Inventory is Little Susitna River, about 18 miles northwest of the Airport.¹²⁷

¹²⁴ Ibid.

¹²⁵ National Wild and Scenic Rivers System, About the WSR Act. Accessed: <https://www.rivers.gov/wsr-act.php>, February 2023.

¹²⁶ National Wild and Scenic Rivers System, Alaska. Accessed: <https://www.rivers.gov/alaska.php>, March 2023.

¹²⁷ National Park Service, Nationwide Rivers Inventory, Little Susitna River. Accessed: <https://www.nps.gov/maps/full.html?mapId=8adbe798-0d7e-40fb-bd48-225513d64977>, March 2023.